

QUINTANA PETROLEUM CORPORATION

1050 SEVENTEENTH STREET
SUITE 400
DENVER, COLORADO 80265
(303) 628-9211

January 6, 1987

Bureau of Land Management
P. O. Box 7
Monticello, UT 84535

Re: Deadman Canyon Federal #1-28
Section 28, T37S-R24E
San Juan County, Utah

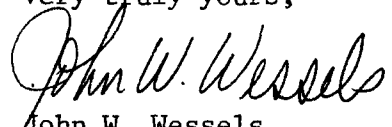
Gentlemen:

This letter is to inform you that Permitco is authorized to act as Agent and to sign documents on behalf of Quintana Petroleum Corporation when necessary for filing county, state and federal permits including Onshore Order No. 1, Right-of-Way applications, etc. for the referenced well.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Quintana Petroleum Corporation agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above-mentioned well.

Very truly yours,


John W. Wessels
District Operations Manager

cc: Lisa Green, Permitco

jp

CONFIDENTIAL

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. Type of Well

Oil Well ☒Gas Well ☐Other ☐Single Zone ☐Multiple Zone ☐

2. Name of Operator

Quintana Petroleum Corp.

1050-17th St., Suite 400

Denver, CO 80265 (303/628-9211)

3. Address of Operator

PERMITCO INC. - Agent

P.O. Box 44065

Denver, CO 80201-4065 (303/322-7878)

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

500' FNL and 500' FWL

At proposed prod. zone

NW NW

14. Distance in miles and direction from nearest town or post office*

22 miles southeast of Blanding, Utah

15. Distance from proposed*

location to nearest property or lease line, ft. (Also to nearest drig. line, if any)

500'

16. No. of acres in lease

640

17. No. of acres assigned to this well

40

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

none

19. Proposed depth

6300' *check*

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

5712' GR

22. Approx. date work will start*

April 1, 1987

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8"	36#	2000'	760 sx or suffic. to circ to surf.
8-3/4"	5-1/2"	15.5 & 17#	6300'	350 sx or suffic. to cover zones of interest.

Quintana Petroleum Corp. proposes to drill a well to 6300' to test the Ismay and Desert Creek formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 1-21-87BY: John R. BayWELL SPACING: 802

RECEIVED
JAN 15 1987

DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed: Lisa Y. GreenTitle: Agent for

Quintana Petroleum Corp.

Date: 1/12/87

(This space for Federal or State office use)

Permit No. 43-037-31306

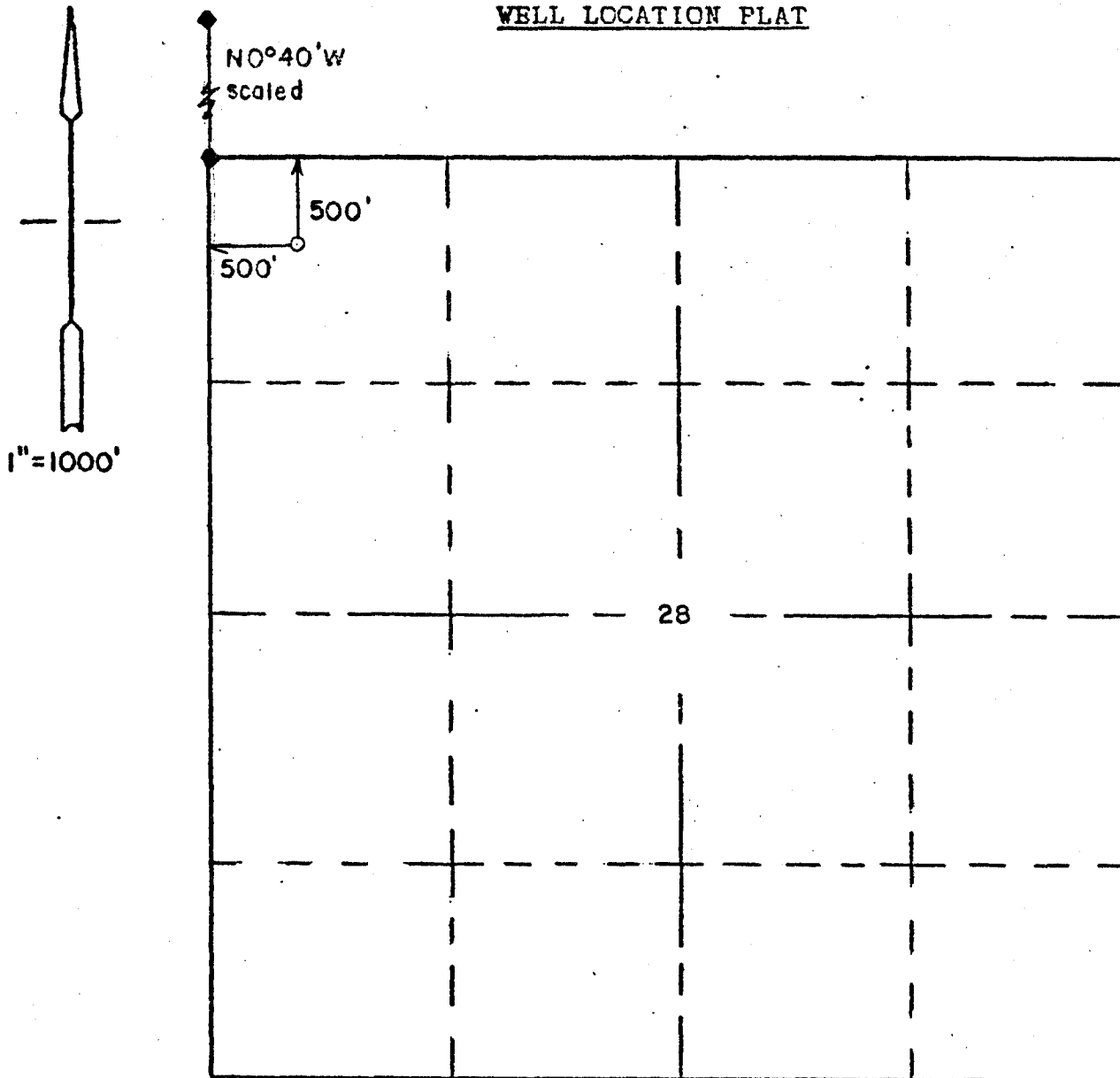
Approval Date _____

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

WELL LOCATION PLATWELL LOCATION DESCRIPTION:

Quintana Petroleum
 Deadman Canyon # 1-28
 500' FNL & 500' FWL
 Section 28, T.37 S., R.24 E., SLM
 San Juan County, Utah
 5712' grd. elevation
 Reference: N 88°17' W, 161', 5722'

The above plat is true and correct to my knowledge and belief.

12-28-'86

REGISTERED LAND SURVEYOR
 No. 6705
 GERALD G. HUDDLESTON
 STATE OF UTAH
 Gerald G. Huddleston, LS

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

RECEIVED
JAN 15 1987

DIVISION OF
OIL, GAS & MINING

QUINTANA PETROLEUM CORP.
Deadman Canyon Federal #1-28
500' FNL and 500' FWL
Section 28, T37S - R24E
San Juan County, Utah

Prepared For:

QUINTANA PETROLEUM CORP.

By:

PERMITCO INC.
P.O. Box 44065
Denver, Colorado 80201-4065
(303)322-7878

Copies Sent To:

- 4 - BLM - Moab, Utah
- 1 - BLM - Monticello, Utah
- 1 - Div. of Oil, Gas & Mining - SLC, Utah
- 4 - Quintana Petroleum Corp. - Denver, CO



Permitco Incorporated
A Petroleum Permitting Company

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Deadman Canyon Federal 1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

1. The surface formation and estimated formation tops to be encountered are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Dakota	Surface	
Navajo	1143'	+4589'
Wingate	1716'	+4016'
Chinle	1986'	+3746'
Shinarump	2681'	+3051'
Hermosa	4825'	+ 907'
Ismay	5887'	- 155'
Hovenweep Shale	6092'	- 360'
Gothic Shale	6172'	- 440'
Desert Creek	6197'	- 465'
Chimney Rock Shale	6267'	- 535'
Akah	6292'	- 560'
T.D.	6300'	- 568'

2. The estimated depths at which oil, gas, water or other mineral bearing zones are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Anticipated Depth</u>
Oil/Gas	Ismay	5887'
Oil/Gas	Desert Creek	6197'

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth cased and cemented. All oil and gas shows will be tested to determine commercial potential.

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Deadman Canyon Federal 1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

DRILLING PROGRAM

3. Pressure control equipment will consist of a 10", 3000# BOP. (See BOP Diagram attached.)

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The San Juan Resource Area will be notified 1 day before pressure testing.

4. a. Casing

The proposed casing program is as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Wt.</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Conductor	0-40'	17-1/2"	16"	—			
Surface	0-2000'	12-1/4"	9-5/8"	36#	K-55	ST&C	New
Produc.	0-5400'	8-3/4"	5-1/2"	15.5#	K-55	LT&C	New
Produc.	5400-6300'	8-3/4"	5-1/2"	17.0#	K-55	LT&C	New

- b. Cement

The cementing program will be as follows:

Surface

Type and Amount

0-2000'

560 sx Lite w/2% CaCl₂ and 1/4#
Cellophane flake, followed by 200 sx
Class B w/2% CaCl₂ or sufficient to
circulate to surface.

Production

Type and Amount

350 sx Class H w/6% fluid loss additive
or sufficient to cover zones of
interest.



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DRILLING PROGRAM

Anticipated cement tops will be reported as to depth, not the expected number of sacks. The San Juan Resource Area will be notified one day prior to running casing strings and cement.

c. Auxiliary Equipment will be as follows:

1. Kelly cock.
2. Float above the bit.
3. A sub with a full opening valve will be on the floor when the kelly is not in use.
4. Monitoring of the system will be done visually.

5. Drilling fluid will be as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>	<u>PH</u>
0-2000'	Gel/Lime	8.4-8.6	28-35	N/C	-
2000-5000'	Gel/Lime	8.4-8.6	28-35	N/C	-
5000-T.D.	Dispersed	9.0-11.0	35-50	8-10cc	11.5

6. Coring, logging and testing programs are as follows:

- a. No cores are anticipated.
- b. The logging program will consist of the following: A Dual Laterolog and BHC Sonic will be run from surface casing to T.D. A CNL Litho Density will be run from T.D. to above the Ismay formation (minimum run).
- c. Drill Stem Tests will be run in the Ismay and Desert Creek formations if shows warrant.

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DRILLING PROGRAM

Whether the well is completed as a dry hole or as a producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. If requested, samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager.

7. Abnormal conditions, bottom hole pressures and potential hazards.
 - a. The maximum bottom hole pressure to be expected is 3400 psi.
 - b. Quintana Petroleum Corp. plans to spud the Deadman Canyon Federal #1-28 during the first week in April (due to the deer winter range stipulation) and intends to complete the well within approximately one month after the well has reached T.D.
 - c. The operator will contact the San Juan Resource Area at 801/587-2141, 48 hours prior to beginning any dirt work on this location.
 - d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.
 - e. The spud date will be reported orally to the San Juan Area Manager, a minimum of 24 hours before spudding. A Sundry Notice (Form 3160-5) will be sent within 24 hours of spudding, reporting the spud date and time. The Sundry will be sent to the District Manager. If spudding is on a weekend or holiday, the Sundry will be submitted on the following regular work day.

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DRILLING PROGRAM

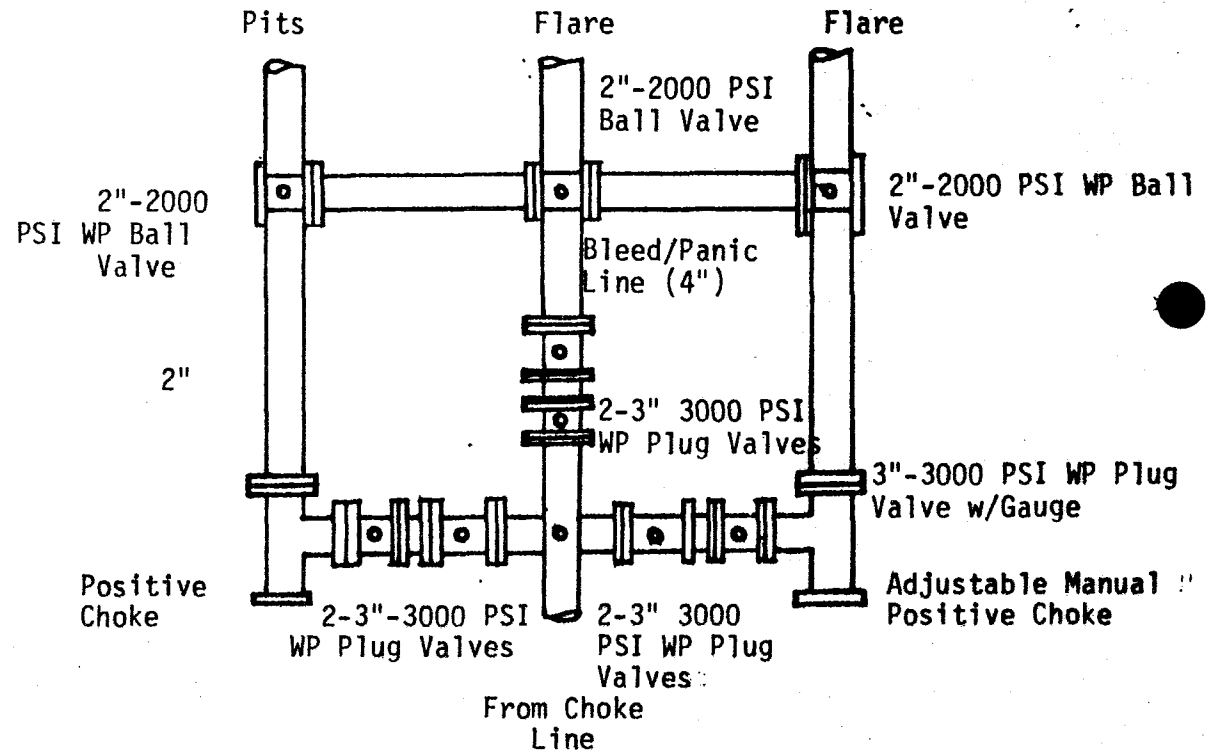
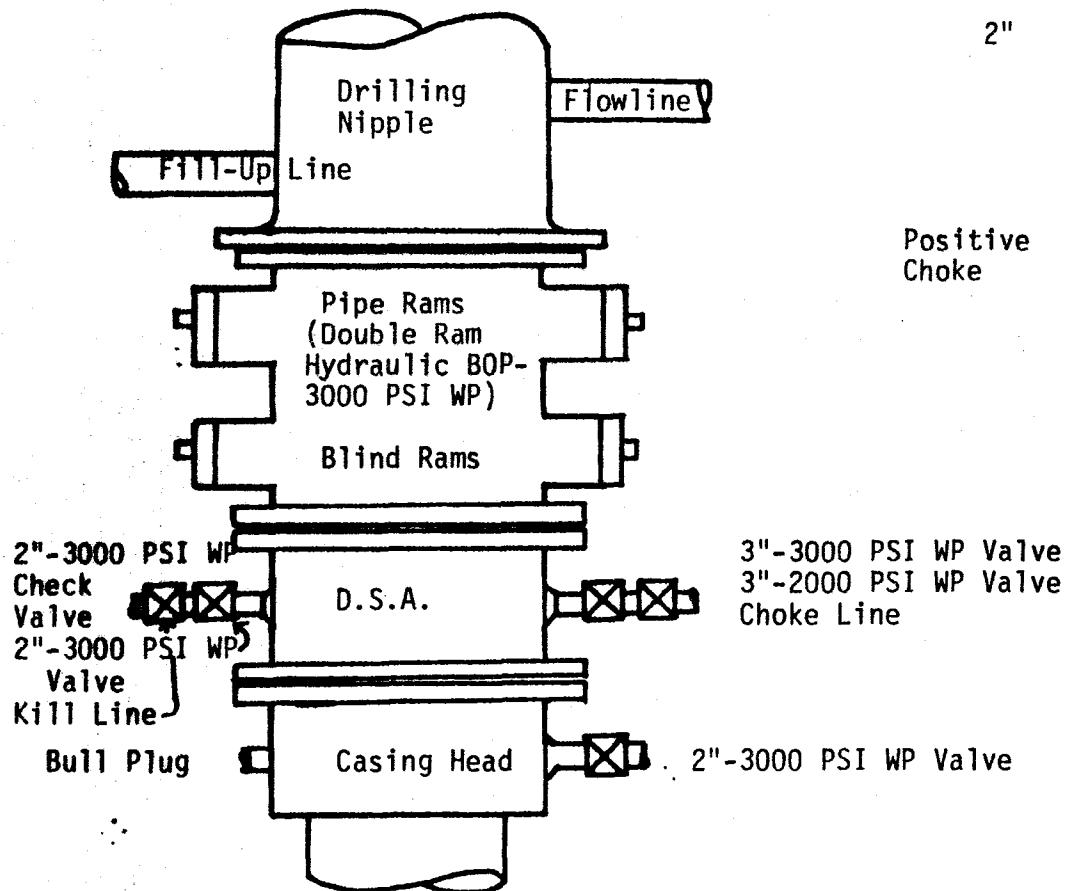
- f. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations", starting with the month in which operations begin and continue each month until the well is physically plugged and abandoned. This report will be sent to the Moab BLM District Office, P. O. Box 970, Moab, Utah 84532.
- g. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.
- h. If a replacement rig is planned for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the District Manager. All conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergencies, verbal approval can be given by the District Petroleum Engineer.
- i. If the well is successfully completed for production, then the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five business days following the date on which the well is placed on production.
- j. No well abandonment operations will begin without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5), will be filed with the District Manager, within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration.
- k. Final abandonment will not be approved until surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the San Juan Area Manager or his representative, or the appropriate surface Manager.

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DRILLING PROGRAM

1. Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.
- m. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently beaded-on with a welding torch: Fed, Well number, location by 1/4 1/4 section, township and range, lease number.
- n. A first production conference will be scheduled within 15 days after receipt of the first production notice. The San Juan Area Manager will schedule the conference.
- o. The following may be inspected and/or witnessed:
 1. The cementing and testing of surface casing, testing BOP's.
 2. (Dry Hole) Setting and testing of surface casing shoe plug.
 3. (Depleted Producer) The setting and testing of plugs across producing horizon and if applicable the surface casing shoe plug and/or annulus (casing to formation) squeeze jobs.
- p. Notify the San Juan Resource area (Mike Wade) one day or (on a dry hole) as soon as possible prior to the above at (801) 587-2141 (W) or (801) 587-2026 (H). If unable to reach Mike, call Moab District Office - Greg Noble at (801) 259-6111 (W) or (801) 259-8811 (H).

PLAIN VIEW-CHOKE MANIFOLD



The hydraulic closing unit will be located in the parts house, 85' from the wellhead. Choke & bleed/panic lines will go to the pit and flare.

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Deadman Canyon Federal 1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

SURFACE USE PLAN

ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan

1. Existing Roads

- a. The proposed well site is located 22 miles east of Blanding, Utah.
- b. Directions to the location from Blanding are as follows:

Go south on Highway 47 for 1.5 miles. Turn east onto the County Road and proceed 1.3 miles. Turn south on the County Road (Perkins #206) and proceed southwesterly for approximately 15 miles. Turn north onto County Road (Alkali #204) and proceed 2.7 miles. Turn right (east) onto the graded road leading to the Deadman Canyon #1-20 and proceed 3/4 mile to a "Y" in the road. Stay right and proceed an additional 3/4 mile. Turn left onto new access (flagged) and continue northeasterly approximately 2200' to the proposed location.
- c. The roads in the area are primarily county roads. See Maps #1 and #2.
- d. Improvement to the existing access will not be necessary.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. An encroachment permit will be obtained from the San Juan County Road Department, 801/587-2231, ext. 43.

2. Planned Access Roads

- a. The last 2200 feet will be new access. The road will be flat bladed initially during construction and upgraded if production is established.

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SURFACE USE PLAN

2. Planned Access Roads (cont.)

- b. A road right-of-way is requested from where the access road leaves the county road in Section 30, T37S - R24E. The length of road crossing BLM lands is approximately 1.6 miles. Enclosed is a check in the amount of \$100.00 to cover filing fees for this right-of-way.
- c. The maximum total disturbed width will be 30 feet.
- d. The grade will be approximately 5%.
- e. Turnouts will be installed as needed. No culverts will be needed at this time.
- f. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance by the San Juan Area Manager.
- g. The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drilling rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.
- h. The Class III Road Standards which ensure drainage control over the entire road through the use of natural, rolling topography; ditch turnouts; drainage dips; outsloping; crowning; low water crossings; and culverts will be determined at the appropriate field inspection.

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location. (See Map #3).

- a. Water Wells - none
- b. Injection or disposal wells - none
- c. Producing Wells - one (#1-20 waiting on completion)
- d. Drilling Wells - none

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SURFACE USE PLAN

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be neutral to match the trees.
- b. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.
- c. A tank battery will be constructed on the wellpad. See Diagram #4 for production facility layout.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Any necessary pits will be properly fenced to prevent any wildlife entry. The production pit will be flagged overhead.
- f. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
- g. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- h. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

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SURFACE USE PLAN

4. Production Facilities (cont.)

- i. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The San Juan Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Moab District Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply

- a. All water needed for drilling purposes will be obtained from a private source.
- b. Water will be trucked to location over the county roads in the area.
- c. No water well is to be drilled on this lease.
- d. Use of water for this operation will approved by obtaining a temporary use permit from the Utah State Engineer, 801/637-1303, and by receiving permission from the land owner of surface management agency to use the land containing the water source.

6. Source of Construction Material

- a. Road surfacing material will be obtained from a commercial source. Pad construction material will be native.
- b. The use of materials under BIM jurisdiction will conform to 43 CFR 3610.2-3. Construction material will be located on lease.

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SURFACE USE PLAN

7. Methods for Handling Waste Disposal

- a. The reserve pit will be lined with native clay, commercial bentonite or plastic sufficient to prevent seepage. At least half of the capacity will be in cut.
- b. Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.
- c. A trash pit will be constructed near the mud tanks and dug at least six feet into solid, undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free. If a trash cage is used, its contents will be hauled to an approved landfill.
- d. A burning permit is required for burning trash between May 1 and October 31. This will be obtained from the San Juan County Sheriff at (801) 587-2237 if operations should extend past May 1st.
- e. Produced waste water will be confined to a lined pit for a period not to exceed 90 days after initial production. During the 90-day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

8. Ancillary Facilities

- a. There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

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SURFACE USE PLAN

9. Well Site Layout

- a. See Diagram #1 for rig layout. See Diagram #2 for cross section of drill pad. See Diagram #3 for cuts and fills.
- b. The location of mud tanks; reserve, burn and trash pits; pipe racks; living facilities and soil stockpiles will be shown on Diagram #1 and #3. The location will be laid out and constructed as discussed during the predrill conference.
- c. The maximum amount of topsoil material will be removed from the location and stockpiled separate from the trees on the northwest side of the location. Topsoil along the access will be reserved in place.
- d. Access to the well pad will be from the southwest.

10. Reclamation

- a. Immediately upon completion of drilling, all trash and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator or his contractor will contact the San Juan Resource Area office in Monticello, Utah (801/587-2141) 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.

ONSHORE ORDER NO. [REDACTED]
Quintana Petroleum Corp.
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San Juan County, Utah

SURFACE USE PLAN

10. Reclamation of Surface (cont.)

- e. The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 12 inches deep with the contour.
- f. Water bars will be built as follows to control erosion.

<u>Grade</u>	<u>Spacing</u>
2%	Every 200 Feet
2-4%	Every 100 Feet
4-5%	Every 75 Feet
5+%	Every 50 Feet

- g. Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.
 - 6 lbs/acre Crested wheatgrass (*Agropyron desertorum*)
 - 2 lbs/acre Fourwing saltbush (*Atriplex canescens*)
 - 2 lbs/acre Desert bitterbrush (*Purshia glandulosa*)
- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed areas. The access will be blocked to prevent vehicular access.
- i. The reserve pit and that portion of the location and access road not needed for production and production facilities will be reclaimed as described in the reclamation section. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.

11. a. Surface Ownership

Federal

b. Mineral Ownership

Federal

ONSHORE ORDER NO. ●
Quintana Petroleum Corp.
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San Juan County, Utah

SURFACE USE PLAN

12. Other Information

- a. There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.
- b. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.
- c. The dirt contractor will be provided with an approved copy of the surface use plan.
- d. If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office will be contacted. All people who are in the area will be informed by the operator that they are subject to prosecution for disturbing archeological sites or picking up artifacts. Salvage or excavation of identified archeological sites will be done by a BLM approved archeologist only if damage occurs.
- e. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
- f. An archeological study was conducted by LaPlata Archaeological Consultants. No significant cultural resources were found and clearance is recommended. A copy of this report will be submitted directly by LaPlata Archeological Consultants.
- g. Your contact with the District Office is: Greg Nobel, 801/259-6111, P.O. Box 970, Moab, Utah 84532.

The Resource Area Manager's address is P.O. Box 7, Monticello, Utah 84532. Your contact is Richard McClure, 801/587-2141.

ONSHORE ORDER NO. 1
Quintana Petroleum Corp.
Deadman Canyon Federal 1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

SURFACE USE PLAN

13. Lessee's or Operator's Representative and Certification

Permit Matters

Permitco Inc.
Lisa L. Green
P.O. Box 44065
Denver, CO 80201-4065
303/322-7878


Drilling & Completion Matters

Quintana Petroleum Corp.
1050-17th St.
Suite 400
Denver, CO 80265
303/628-9211 (W) -
303/969-9468 (H) - Scott Kimbrough

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Quintana Petroleum Corp. and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

January 12, 1987
Date: _____

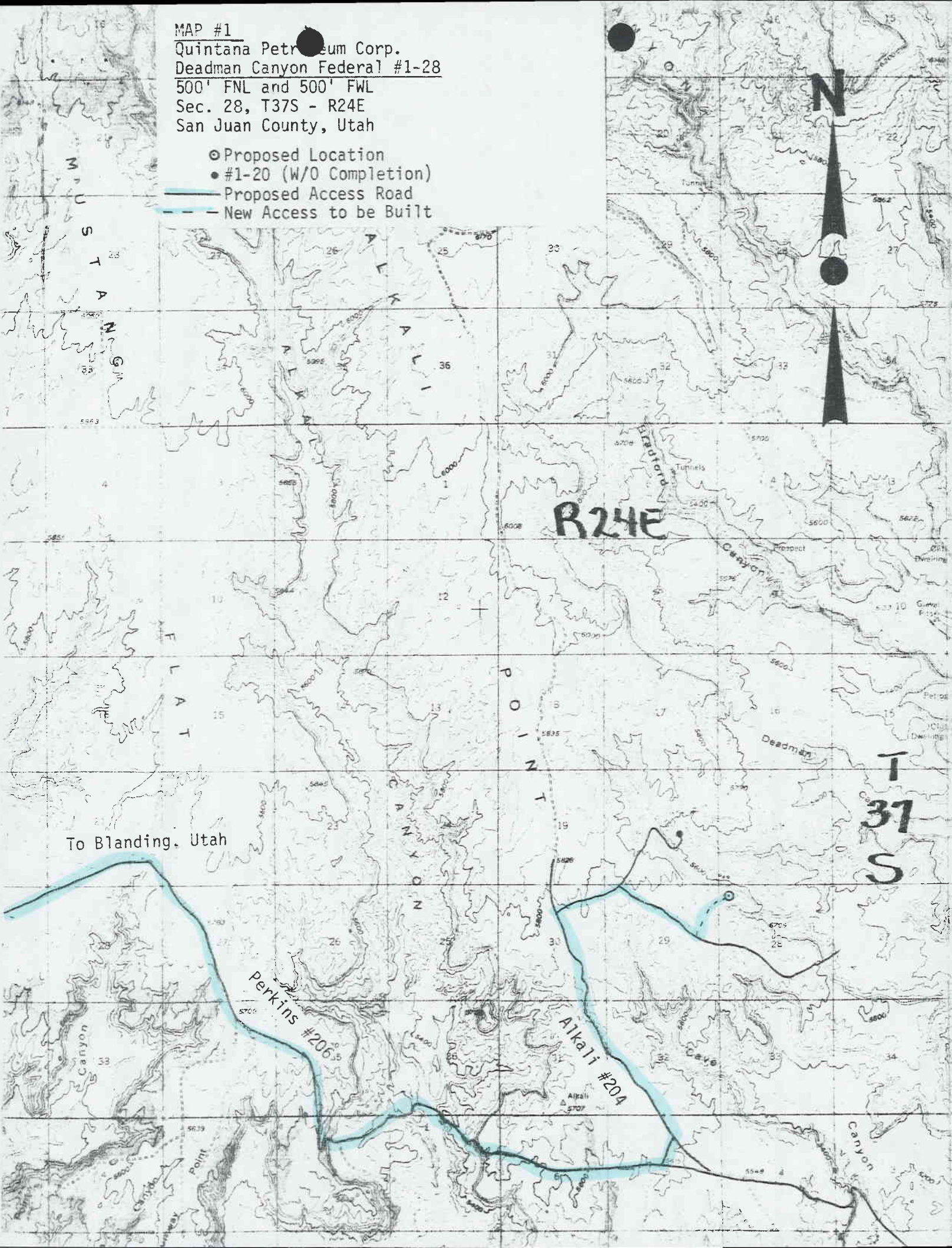


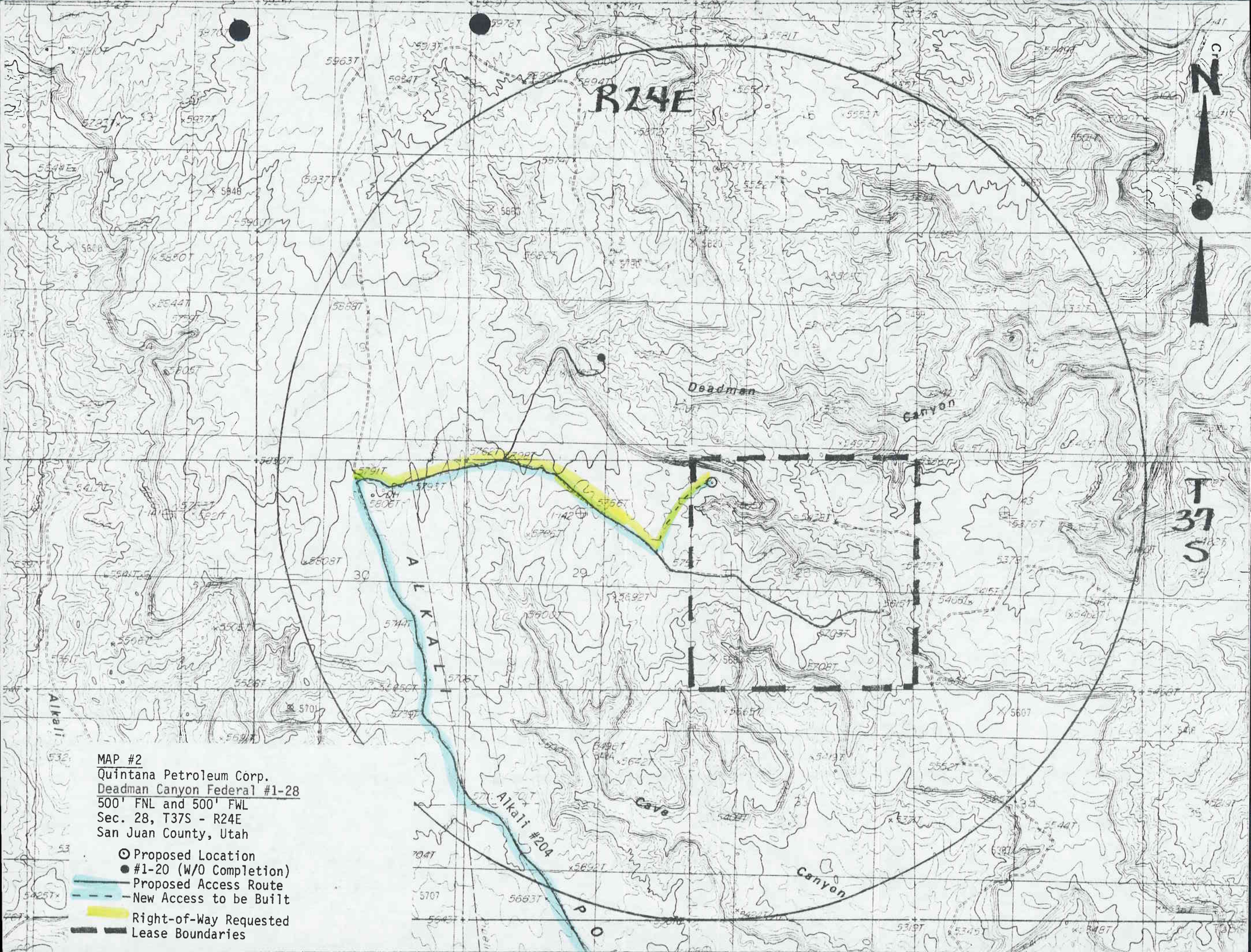
Lisa L. Green - PERMITCO INC.
Authorized Agent for:
QUINTANA PETROLEUM CORP.

MAP #1

Quintana Petroleum Corp.
Deadman Canyon Federal #1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

- Proposed Location
- #1-20 (W/O Completion)
- Proposed Access Road
- - - New Access to be Built



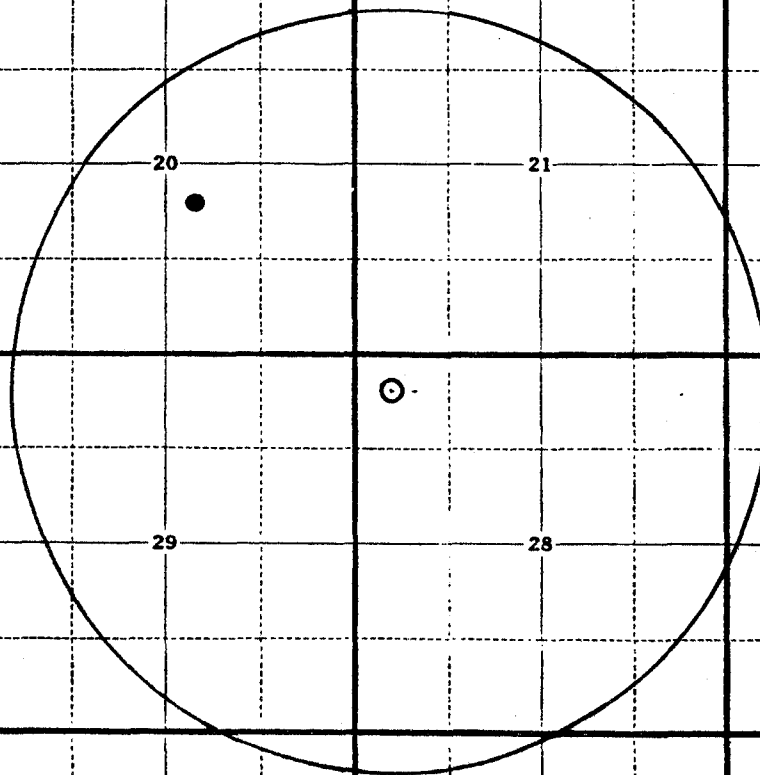


MAP #2
Quintana Petroleum Corp.
Deadman Canyon Federal #1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

- Proposed Location
- #1-20 (W/O Completion)
- Proposed Access Route
- - - New Access to be Built
- Yellow Right-of-Way Requested
- Thick Black Line Lease Boundaries

MAP #
Quintana Petroleum Corp.
Deadman Canyon Federal #1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

⊙ Proposed Location
● #1-20 (W/O Completion)



T
37
S

R 24E

Scale: 1" = 50'

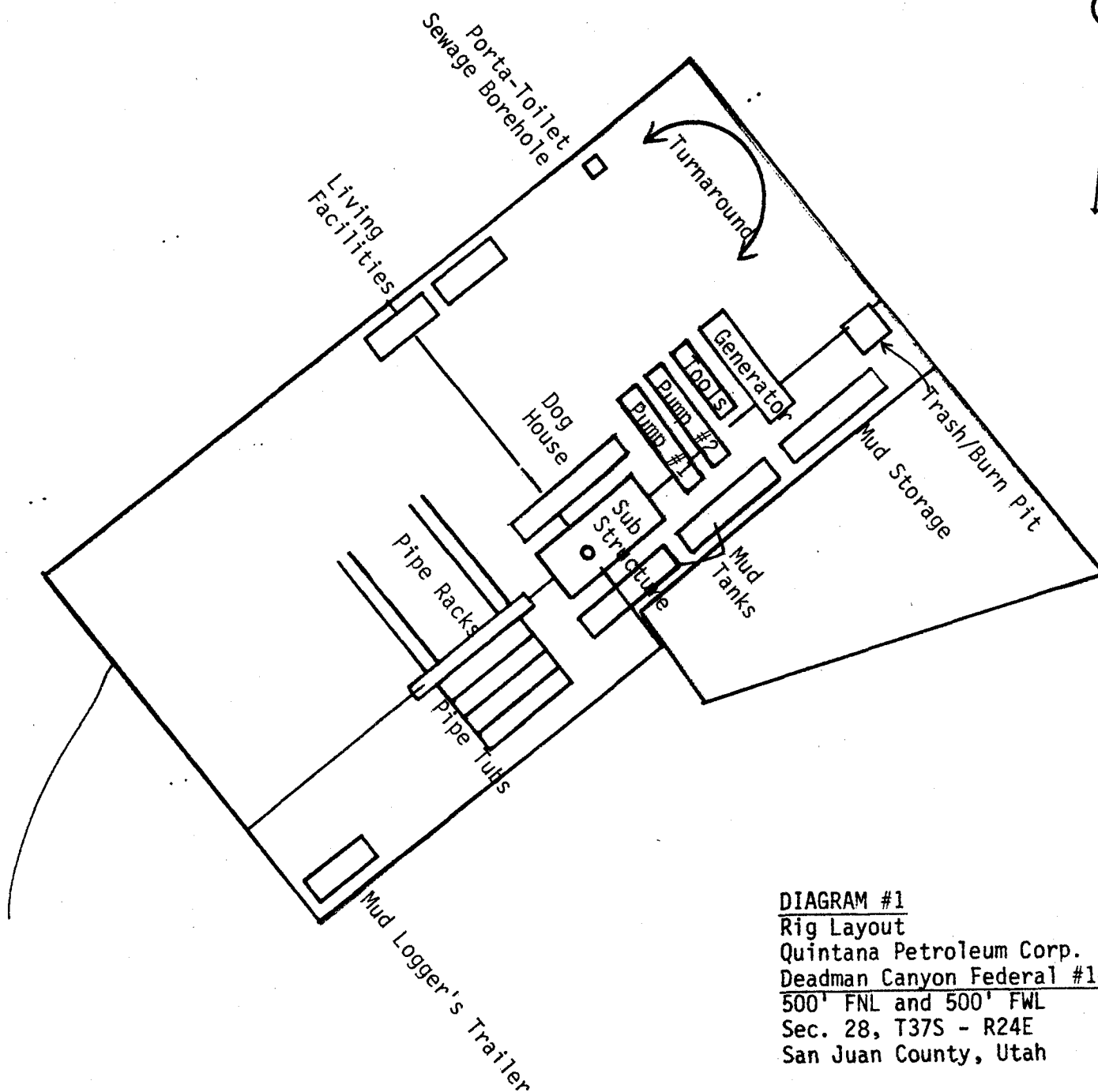


DIAGRAM #1
Rig Layout
Quintana Petroleum Corp.
Deadman Canyon Federal #1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

WELL PAD CROSS-SECTION

DIAGRAM #2

Antana Petroleum Corp.
Deadman Canyon Federal #1-28
500' FNL and 500' FWL
Sec. 28, T37S - R24E
San Juan County, Utah

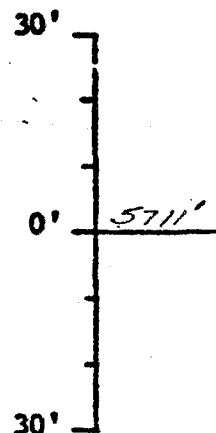
Cut /////
Fill |||||

Scales: 1" = 60' H.
1" = 30' V.

1-28 Deadman Canyon

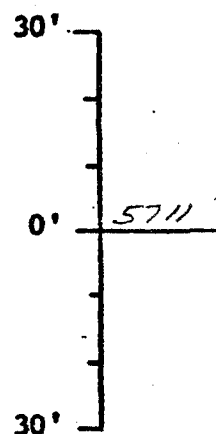
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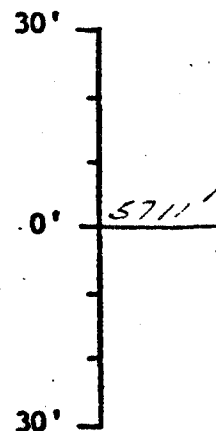
BL

BR



AL

AR



1-28 Deadman Canyon

$$1'' = 60'$$

Archeological Site
To be fenced on three sides
prior to construction

TOPSOIL

cut slope

5712
- 070

Reserve
P.T

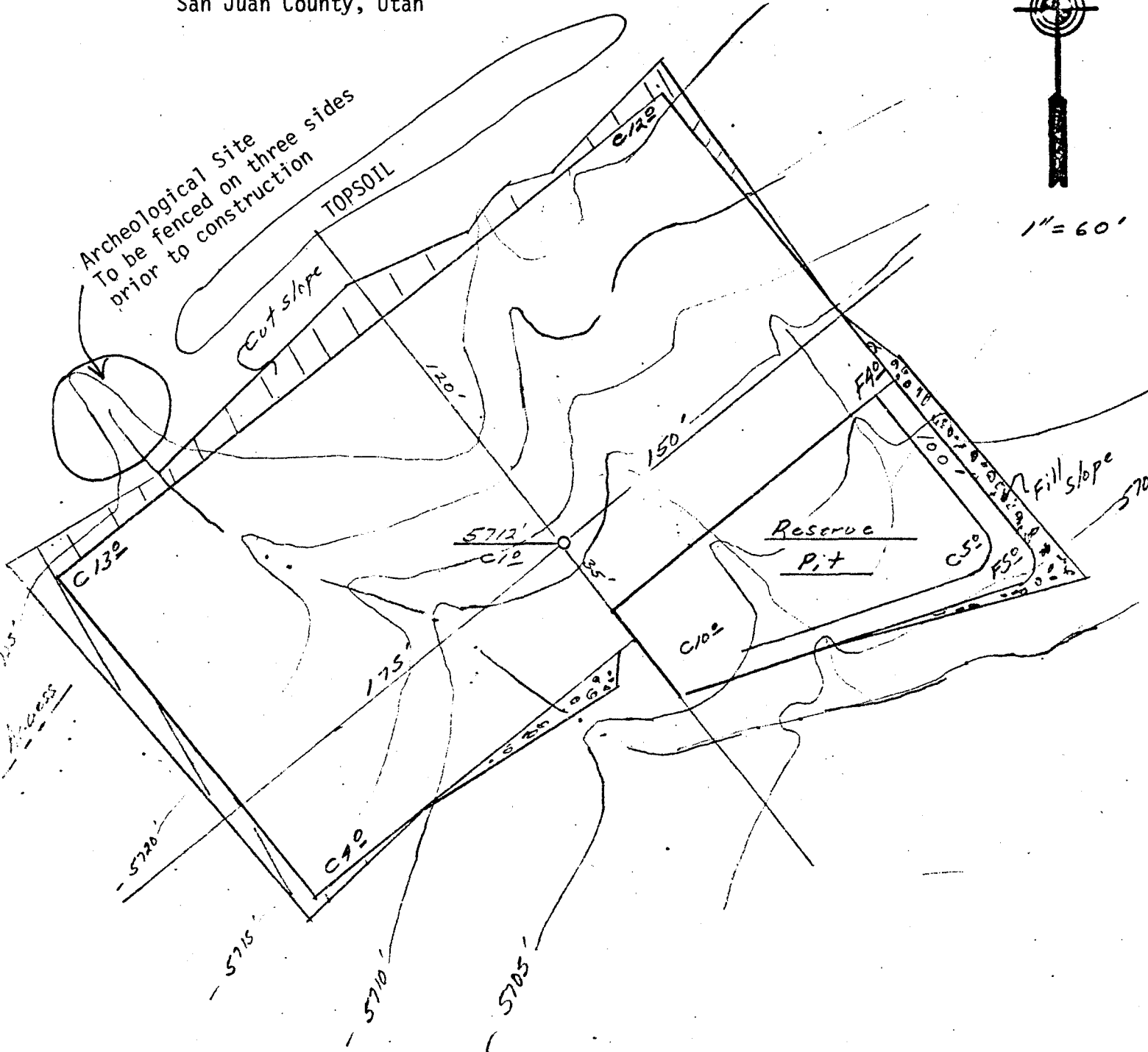


DIAGRAM #4

Quintana Petroleum Corp.

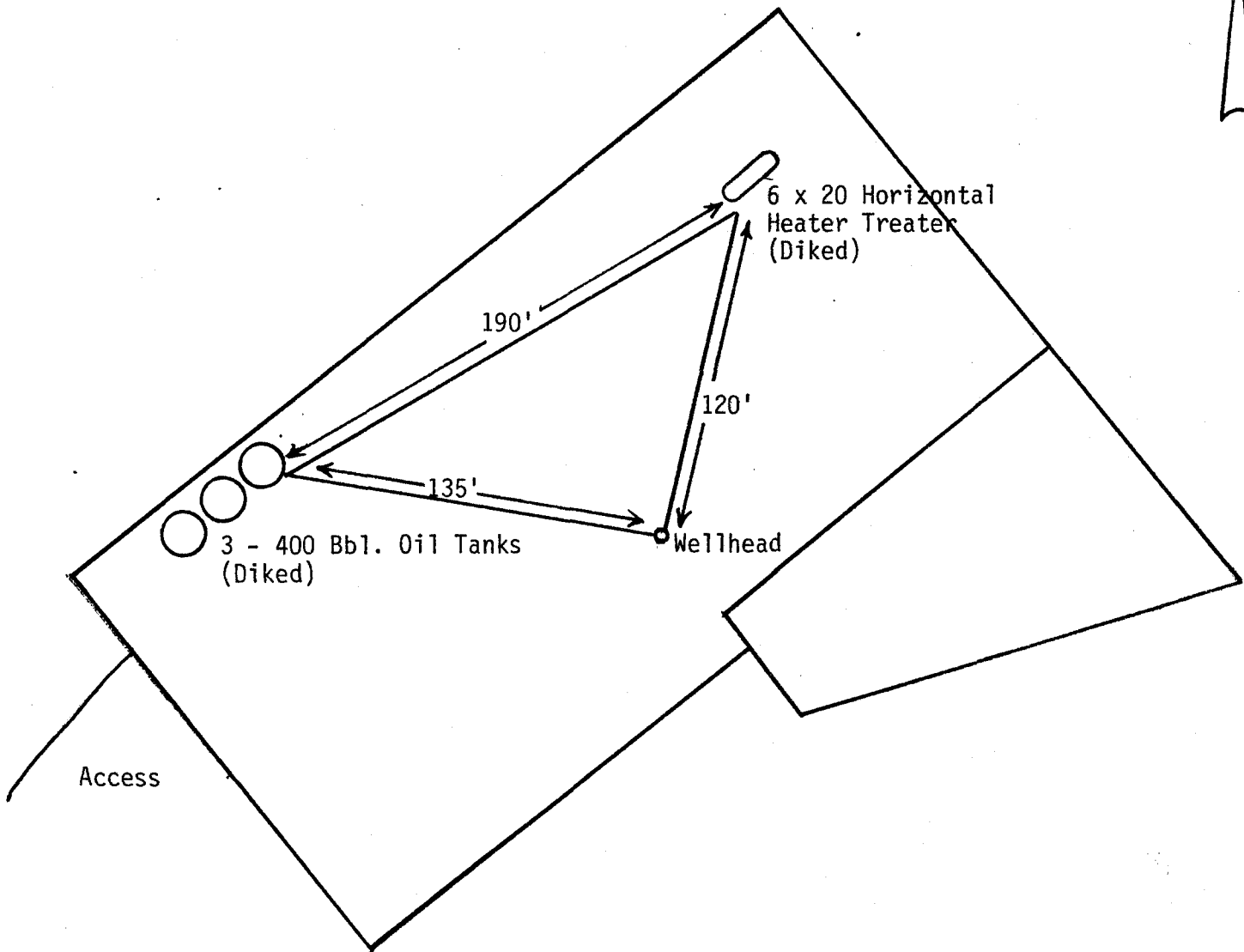
Deadman Canyon Federal #1-28

500' FNL and 500' FWL

Sec. 28, T37S - R24E

San Juan County, Utah

Scale: 1" = 60'



CORE LABORATORIES, INC.*Petroleum Reservoir Engineering*COMPANY QUINTANA PETROLEUM CORPORATIONFILE NO. 43806-3461WELL DEADMAN CANYON # 1-28 FEDERALDATE 24-APRIL-87FIELD DEADMAN CANYONFORMATION PARADOXELEV. 5719 GLCOUNTY SAN JUANSTATE UTAHDRLG. FLD. WBM

CORES _____

LOCATION NW, NW SEC. 28-T37S-R24E

CORRELATION COREGRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc., (all errors or omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

Total Water _____

PERCENT PORE SPACE

100 80 60 40 20 0

Gamma Ray

RADIATION INCREASE →

Permeability _____

MILLIDARCIES

Porosity _____

PERCENT

Oil Saturation 

PERCENT PORE SPACE

PARADOX FORMATION

100 10 1.0 .1

Depth
Feet

5900

30 20 10

0 0 20 40 60 80 100

UPPER ISHAY ZONE

C-1 5943-6003 (27' core loss)

C-2 6003-6038 (10' core loss)

5950

6000

6050

6100

6150

[illegible]

6200

~~CONFIDENTIAL~~

012212

032109

OPERATOR Quintana Petroleum Corp DATE 1-20-87

WELL NAME Leadman Canyon Fed 1-28

SEC NW NW 28 T 37S R 24E COUNTY San Juan

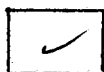
43-037-31306

API NUMBER

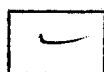
Fed

TYPE OF LEASE

CHECK OFF:



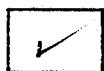
PLAT



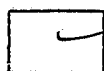
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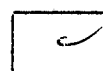
NEAREST
WELL



LEASE



FIELD



POTASH OR
OIL SHALE

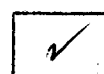
PROCESSING COMMENTS:

No other well within 920'

Water of - 09-1500 (T 62247)

APPROVAL LETTER:

SPACING: ☐ 203 _____ UNIT



302



CAUSE NO. & DATE



302.1

STIPULATIONS:



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

January 21, 1987

Quintana Petroleum Corporation
c/o Permitco Inc.
P. O. Box 44065
Denver, Colorado 80201-4065

Gentlemen:

Re: Deadman Canyon Federal 1-28 - NW NW Sec. 28, T. 37S, R. 24E
500' FNL, 500' FWL - San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Rule 302, Oil and Gas Conservation General Rules.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule 311.3, Associated Gas Flaring, Oil and Gas Conservation General Rules.
5. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at the drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable State and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 533-6163.

Page 2
Quintana Petroleum Corporation
Deadman Canyon Federal 1-28
January 21, 1987

6. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31306.

Sincerely,



R. D. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielsen
8159T

FILING FOR WATER IN THE STATE OF UTAH

030703

21055

Rec. by JA

Fee Paid \$ 15.00

Platted _____

Microfilmed _____

Roll # _____

APPLICATION TO APPROPRIATE WATER

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

WATER USER CLAIM NO. 09 - 1500

APPLICATION NO. T62247

1. PRIORITY OF RIGHT: January 15, 1987

FILING DATE: January 15, 1987

2. OWNER INFORMATION

Name: Quintana Petroleum Corporation (303-628-9211)

Address: 1050 17th Street, Denver, CO 80265

The land is not owned by the applicant(s), see explanatory.

3. QUANTITY OF WATER: 8.0 acre feet (Ac. Ft.)

4. SOURCE: Artesian Well DRAINAGE: San Juan River

POINT(S) OF DIVERSION:

COUNTY: San Juan

(1) N. 531 feet, W. 1810 feet, from the W $\frac{1}{4}$ Corner of Section 01,
Township 38 S, Range 24 E, SLB&M

Description of Diverting Works: 1 inch diameter well.

COMMON DESCRIPTION: 8 mi. No. Hatch Trading Post

5. NATURE AND PERIOD OF USE

Oil Exploration From January 15 to January 15.

RECEIVED
FEB 13 1987

6. PURPOSE AND EXTENT OF USE

Oil Exploratio: Oil well drilling

DIVISION OF
OIL GAS & MINING

EXPLANATORY

The land is owned by Richard and Debra Gore. A letter of permission will be sent to your office by Mrs. Gore.

This application is being submitted for the following wells:

✓1) Deadman Canyon Federal #2-20 (SE4SE4): 43-037-31303 Pow/15my
N. 500 ft. & W. 780 ft. from SE Cor. Sec. 20, T37S, R24E, SLB&M.

✓2) Deadman Canyon Federal #3-20 (SE4NW4): 43-037-31304 TA
S. 2380 ft. & E. 2180 ft. from NW Cor. Sec. 20, T37S, R24E, SLB&M.

3) Deadman Canyon Federal #4-20 (NW4NW4): 43-037-31305 Ort. Cont.
S. 660 ft. & E. 690 ft. from NW Cor. Sec. 20, T37S, R24E, SLB&M.

4) Deadman Canyon Federal #1-28 (NW4NW4): 43-037-31306 row/15my Cont.
S. 500 ft. & E. 500 ft. from NW Cor. Sec. 28, T37S, R24E, SLB&M.

The estimated period of time to drill each oil well is approx. 25 days.

Spud date is pending approval of the Permit to Drill submitted to the BLM, however, we anticipate spudding the first location on approx. Jan. 20, 1987.

The last location will be spud approx. April 1, 1987 due to a deer winter range stipulation imposed by the BLM.

Appropriate

The applicant hereby acknowledges he/they are a citizen(s) of the
United States or intends to become such a citizen.

The quantity of water sought to be appropriated is limited to that which
can be beneficially used for the purpose herein described.

The undersigned hereby acknowledges that even though he/they may have been assisted in
the preparation of the above-numbered application through the courtesy of the employees
of the Division of Water Rights, all responsibility for the accuracy of the information
contained therein, at the time of filing, rests with the applicant(s).

Signature of Applicant

STATE ENGINEER'S ENDORSEMENT


WATER RIGHT NUMBER: 09 - 1500

APPLICATION NO. T62247

1. January 15, 1987 Application received by MP.
 2. January 16, 1987 Application designated for APPROVAL by MP and SG.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated January 30, 1987, subject to prior rights and this application will expire on January 30, 1988.


Robert L. Morgan, P.E.
State Engineer

FILING FOR WATER IN THE STATE OF UTAH

APPLICATION TO APPROPRIATE WATER

#21729

Rec. by SA
Fee Paid \$ 15.00
Platted _____
Microfilmed _____
Roll # _____

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

WATER USER CLAIM NO. 09 - 1504

APPLICATION NO. T62267

1. PRIORITY OF RIGHT: February 2, 1987FILING DATE: February 2, 19872. OWNER INFORMATION

Name: Quintana Petroleum Corporation
phone (303) 628-9211
Address: 1050-17th Street, Denver, CO 80265

The land is not owned by the applicant(s), see explanatory.

3. QUANTITY OF WATER: 8.0 acre feet (Ac. Ft.)DIVISION OF
OIL, GAS & MINING4. SOURCE: Two Springs DRAINAGE: San Juan River
POINT(S) OF DIVERSION:

COUNTY: San Juan

(1) S. 2485 feet, E. 2125 feet, from the NW Corner of Section 20,
Township 37 S, Range 24 E, SLB&M

(2) S. 2510 feet, E. 2150 feet, from the NW Corner of Section 20,
Township 37 S, Range 24 E, SLB&M

Description of Diverting Works: Tank trucks

COMMON DESCRIPTION: 10.5 mi. SE of Blanding

5. NATURE AND PERIOD OF USE

Oil Exploration From January 15 to January 15.

6. PURPOSE AND EXTENT OF USE

Oil Exploration: Oil and gas drilling operations.

7. PLACE OF USE

The water is used in all or parts of each of the following legal subdivisions.

TOWN	RANGE	SEC	North East Quarter				North West Quarter				South West Quarter				South East Quarter			
			NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$
37 S	24 E	20						X		X								X
37 S	24 E	28						X										

All locations in Salt Lake Base and Meridian

EXPLANATORY

The land is owned by the BLM - Leased by Quintana for drilling purposes.
Water may be supplemented by trucking water from pond in San Juan County
located: See 09-1500 (T62247). N. 531 ft. & W. 1810 ft. from NW Cor.
Sec. 1, T38S, R24E, SLB&M. Land owned by Richard & Debra Gore - Permit #7854.
Drill site locations are as follows:
Deadman Canyon Fed. #2-20:
N. 500 ft. & W. 780 ft. from SE Cor. Sec. 20, T37S, R24E, SLB&M.
Deadman Canyon Fed. #3-20:

Appropriate

S. 2380 ft. & E. 2180 ft. from NW Cor. Sec. 20, T37S, R24E, SLB&M.
Deadman Canyon Fed. #4-20:

S. 1100 ft. & E. 820 ft. from NW Cor. Sec. 20, T37S, R24E, SLB&M.
Deadman Canyon Fed. #1-28:

S. 500 ft. & E. 500 ft. from NW Cor. Sec. 28, T37S, R24E, SLB&M.

The applicant hereby acknowledges he/they are a citizen(s) of the
United States or intends to become such a citizen.

The quantity of water sought to be appropriated is limited to that which
can be beneficially used for the purpose herein described.

The undersigned hereby acknowledges that even though he/they may have been assisted in
the preparation of the above-numbered application through the courtesy of the employees
of the Division of Water Rights, all responsibility for the accuracy of the information
contained therein, at the time of filing, rests with the applicant(s).

Signature of Applicant

STATE ENGINEER'S ENDORSEMENT

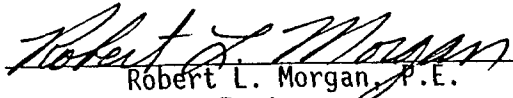
WATER RIGHT NUMBER: 09 - 1504

APPLICATION NO. T62267

1. February 2, 1987 Application received by MP.
 2. February 2, 1987 Application designated for APPROVAL by MP and SG.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated February 18, 1987, subject to prior rights and this application will expire on February 18, 1988.


Robert L. Morgan, P.E.
State Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
(Other Institution on
Reverse Side)

CONFIDENTIAL

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

FEB 25 1987

5. LEASE DESIGNATION AND SERIAL NO.
8-49678

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A 022803

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

Deadman Canyon Federal

9. WELL NO.

#1-28

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLEK.
AND SURVEY OR AREA

Sec. 28, T37S - R24E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

12. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

B. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Quintana Petroleum Corp. 1050-17th Street, Suite 400
Denver, CO 80265 (303/628-9211)

3. ADDRESS OF OPERATOR

PERMITCO INC - Agent P.O. Box 44065
Denver, CO 80201-4065 (303/322-7878)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

500' FNL and 500' FWL

At proposed prod. zone

NW NW

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

22 miles southeast of Blanding, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

500'

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

none

19. PROPOSED DEPTH

6300'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5712' GR

22. APPROX. DATE WORK WILL START*

April 1, 1987

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	2000'	760 sx or suffic. to circ to surf.
8-3/4"	5-1/2"	15.5 & 17#	6300'	350 sx or suffic. to cover zones of interest.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

[Signature]

TITLE

Agent for
Quintana Petroleum Corp.

DATE

1/12/87

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

[Signature]

TITLE

Acting DISTRICT MANAGER

DATE

FEB 24 1987

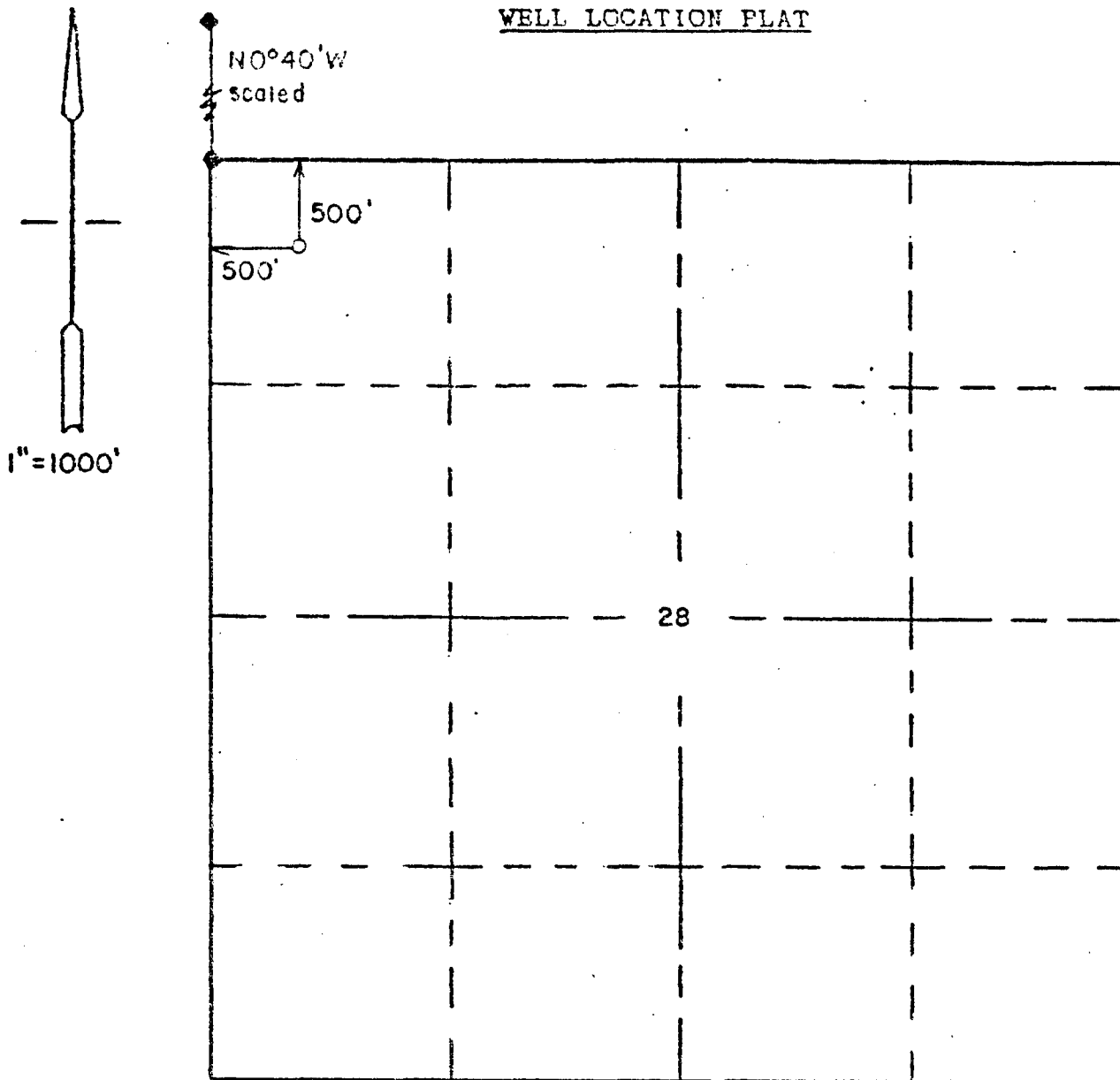
CONDITIONS OF APPROVAL, IF ANY:

FLARING OR VENTING OF
GAS IS SUBJECT OF NTL 4-A
DATED 1/1/80

SUBJECT TO RIGHT OF WAY
APPROVAL

CONDITIONS OF APPROVAL ATTACHED
*See Instructions On Reverse Side

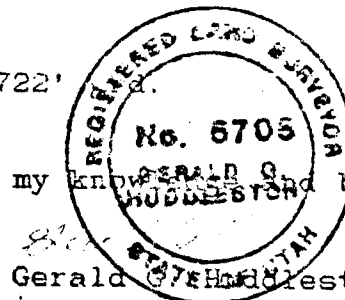
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

WELL LOCATION PLATWELL LOCATION DESCRIPTION:

Quintana Petroleum
 Deadman Canyon # 1-28
 500' FNL & 500' FWL
 Section 28, T.37 S., R.24 E., SLM
 San Juan County, Utah
 5712' grd. elevation
 Reference: N 88°17' W, 161', 5722'

The above plat is true and correct to my knowledge and belief.

12-28-'86



Quintana Petroleum Corporation
Well No. Deadman Canyon Federal 1-28
Sec. 28, T. 37 S., R. 24 E.
San Juan County, Utah
Lease U-49678

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

B. THIRTEEN POINT SURFACE USE PLAN

1. Drilling will be allowed only from April 1 to November 30 for the protection of deer winter range.
2. Prior to construction, the archaeological site at the right front of location will be fenced for avoidance.

041411

DIVISION OF OIL, GAS AND MINING

SPODDING INFORMATION

API #43-037-31306

NAME OF COMPANY: QUINTANA PETROLEUM COMPANY

WELL NAME: DEADMAN CANYON FEDERAL #1-28

SECTION NW NW 28 TOWNSHIP 37 S RANGE 24E COUNTY SAN JUAN

DRILLING CONTRACTOR EXTER

RIG # 68

SPODDED: DATE 4-10-87

TIME 1:00 AM

How Rotary

DRILLING WILL COMMENCE

REPORTED BY Ray Koehn

TELEPHONE # 678-2278 - #136

DATE 4-10-87 SIGNED SBH



CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY QUINTANA PETROLEUM CORPORATION FILE NO. 43806-3461
 WELL DEADMAN CANYON # 1-28 FEDERAL DATE 24-APRIL-87
 FIELD DEADMAN CANYON FORMATION PARADOX ELEV. 5718 GL
 COUNTY SAN JUAN STATE UTAH DRLG. FLD. WBM CORES _____
 LOCATION NW, NW SEC. 28-T37S-R24E

CORRELATION COREGRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc., (all errors or omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

Total Water _____

PERCENT PORE SPACE

100 80 60 40 20 0

Gamma Ray

RADIATION INCREASE →

Permeability _____

MILLIDARCIES

100 10 1.0 .1

Depth
Feet

5900

Porosity _____

PERCENT

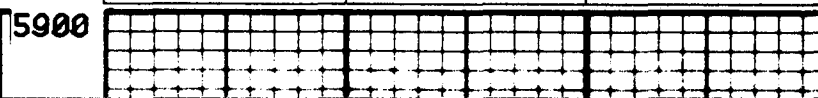
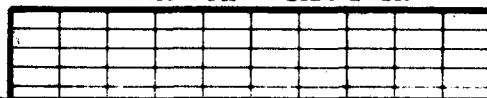
30 20 10

Oil Saturation _____

PERCENT PORE SPACE

0 0 20 40 60 80 100

PARADOX FORMATION



UPPER ISHAY ZONE

c-1 5943-6003 (27' core loss)

c-2 6003-6038 (10' core loss)

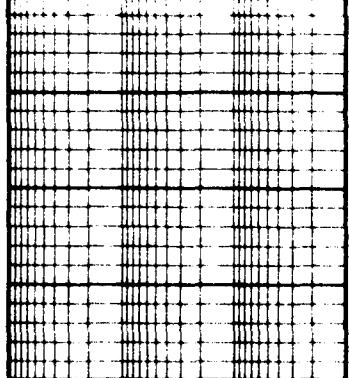
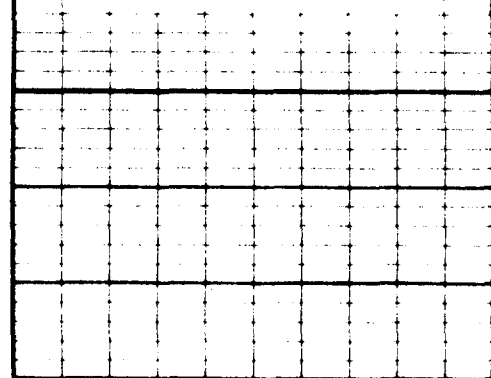
5950

6000

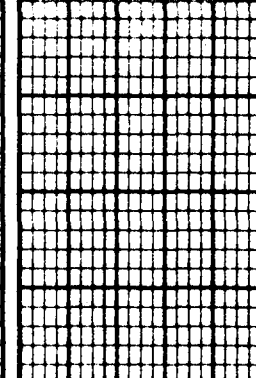
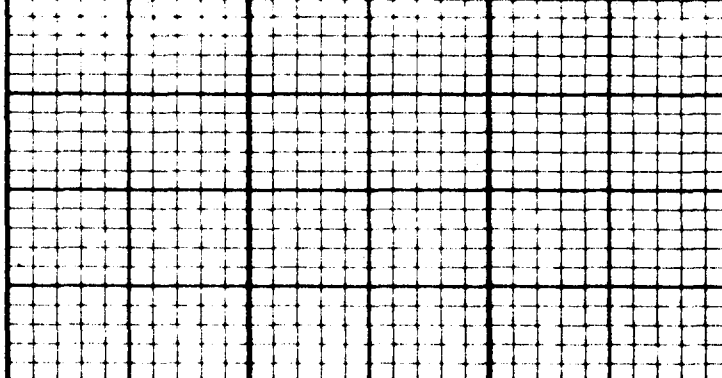
6050

6100

6150



6200



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND NO.
U-49678 060209

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

DEADMAN CANYON FEDERAL

9. WELL NO.

#1-28

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Section 28, T37S-R24E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

QUINTANA PETROLEUM CORPORATION

(303)628-9211

3. ADDRESS OF OPERATOR

1050 -17th Street, Suite 400, Denver, Colorado 80265

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

500' FNL & 500' FWL (NW NW)

14. PERMIT NO.

43-037-31306

15. ELEVATIONS (Show whether DT, RT, GR, etc.)
5712' GR

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON ☐

CHANGE PLANS ☐

PROGRESS REPORT ☒

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT ☐

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

SUMMARY OF OPERATIONS - As of 5/25/87

1. Drilled to 6295'. Logged.
2. Ran and cemented 5½" casing.
3. Rig released 4/26/87.
4. Now waiting on completion unit.

CONFIDENTIAL

RECEIVED
MAY 28 1987

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED J. Williams

TITLE Production Technician

DATE 5/26/87

(This space for Federal or State office use)

APPROVED BY _____

CONDITIONS OF APPROVAL, IF ANY: _____

TITLE _____

DATE _____

cc: Utah DOGM

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0113
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	5. LEASE DESIGNATION AND SERIAL NO. U-56219
2. NAME OF OPERATOR QUINTANA PETROLEUM CORPORATION	6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A 060212
3. ADDRESS OF OPERATOR 1050 - 17th Street, Suite 400, Denver, Colorado 80265	7. UNIT AGREEMENT NAME COYOTE WASH UNIT
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) See also space 17 below. At surface 2160' FSL & 1960' FEL (NW SE)	8. FARM OR LEASE NAME COYOTE WASH UNIT
14. PERMIT NO. 43-047-31794	9. WELL NO. #1-28
15. ELEVATIONS (Show whether DP, RT, GR, etc.) 5228' GR	10. FIELD AND POOL, OR WILDCAT Wildcat
	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 28, T8S-R24E
	12. COUNTY OR PARISH Uintah
	13. STATE Utah

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF
FRACTURE TREAT
SHOOT OR ACIDIZE
REPAIR WELL
(Other)

PULL OR ALTER CASING
MULTIPLE COMPLETE
ABANDON*
CHANGE PLANS

PROGRESS REPORT

☐
☐
☐
☐
☒

SUBSEQUENT REPORT OF:

WATER SHUT-OFF
FRACTURE TREATMENT
SHOOTING OR ACIDIZING
(Other)

REPAIRING WELL
ALTERING CASING
ABANDONMENT*

☐
☐
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☐

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

SUMMARY OF OPERATIONS - As of 5/26/87

1. Spud well with dry hole digger 4/29/87.
2. Drilled to 255'. Ran and cemented 9 5/8" casing at 250'.
3. MI & RU Olsen Rig #5. Drilled 7 7/8" hole to 6325'.
4. Logged. Drilled to 6333'.
5. Set 5 1/2" casing.
6. Released rig 5/13/87.
7. MI service rig. Perforated well.
8. Ran 2 7/8" tubing. Frac'd well.
9. Now flow testing.

CONFIDENTIAL

RECEIVED
MAY 28 1987

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED William

TITLE Production Technician

DATE 5/26/87

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

cc: Utah DOGM

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-49678 <i>Dulg</i>
2. NAME OF OPERATOR QUINTANA PETROLEUM CORPORATION (303)628-9211		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A 062926
3. ADDRESS OF OPERATOR 1050 -17th Street, Suite 400, Denver, Colorado 80265		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 500' FNL & 500' FWL (NW NW)		8. FARM OR LEASE NAME DEADMAN CANYON FEDERAL
14. PERMIT NO. 43-037-31306		9. WELL NO. #1-28
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5712' GR		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 28, T37S-R24E
		12. COUNTY OR PARISH San Juan
		13. STATE Utah

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other)	<input type="checkbox"/>		<input checked="" type="checkbox"/>

PROGRESS REPORT

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)	<input type="checkbox"/>		<input type="checkbox"/>

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

SUMMARY OF OPERATIONS - AS OF 6/23/87

1. MI RU completion rig (Big "A" Well Service #12) 6/4/87.
 2. Perforated - squeezed perfs.
 3. Perforated. Swabbed well. Squeezed perfs.
 4. Perforated. Swabbed well. Set CIBP.
 5. Perforated. Swabbed well. Perforated. Swabbed well.
 6. Acidized. Flow tested well. Set packer.
 7. Completion rig released 6/17/87.
 8. RU separator and tanks to flow test well.
 9. SI for BHP. Installed BPV in bottom of tree.
 10. Well now SI waiting on facilities.
- FINAL REPORT.

RECEIVED
JUN 26 1987

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED *M. Williams*

TITLE Production Technician

DATE 6/24/87

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

cc: Utah DOGM

*See Instructions on Reverse Side

QUINTANA PETROLEUM CORPORATION

1050 SEVENTEENTH STREET
SUITE 400
DENVER, COLORADO 80265
(303) 628-9211

September 14, 1987

SEP 21 1987

DIVISION OF OIL
& GAS

State of Utah
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, Utah 84180-1204

RE: Deadman Canyon Federal #1-28
Section 28, T37S-R24E
San Juan County, Utah

CONFIDENTIAL

Gentlemen:

Enclosed for your files please find copies of the following information on the subject well:

1. Well Completion Report
2. Geologist's Report
3. Core Analysis
4. Oil Analysis
5. Mud Log
6. Electric Logs

We request that this and all information received on this well be held confidential for the maximum time period.

Very truly yours,



Jeannie Williams
Production Technician

/jw
enclosures

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CONFIDENTIAL

CORE ANALYSIS REPORT

FOR

QUINTANA PETROLEUM CORPORATION

DEADMAN CANYON # 1-28 FEDERAL
DEADMAN CANYON
SAN JUAN, UTAH

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SEP. 21 1987

DIVISION OF OIL
GAS & MINING

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

PAGE 1

DALLAS, TEXAS

QUINTANA PETROLEUM CORPORATION
 DEADMAN CANYON # 1-28 FEDERAL
 DEADMAN CANYON
 SAN JUAN, UTAH

DATE : 24-APRIL-87
 FORMATION : PARADOX
 DRLG. FLUID: WBM
 LOCATION : NW, NW SEC. 28-T37S-R24E

FILE NO : 43806-3461
 ANALYSTS : DS/SF
 ELEVATION: 5718 GL

FULL DIAMETER ANALYSIS-BOYLE'S LAW POROSITY

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM	AIR (MD) 90 DEG	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
UPPER ISMAY ZONE CORE # 1 5943-6003								
1	5943.0-44.0	51.	36.	30.9	6.1	32.7	2.87	DOL BRN FNXLN P-P
2	5944.0-45.0	44.	15.	29.5	12.3	31.4	2.83	DOL BRN FNXLN P-P
3	5945.0-46.0	4.05	3.32	11.4	14.3	46.6	2.91	DOL BRN FNXLN SL/ANHY
4	5946.0-47.0	36.	*	18.2	22.0	43.9	2.87	DOL BRN FNXLN SL/ANHY
5	5947.0-48.0	4.48	1.98	11.9	7.8	32.9	2.89	DOL BRN FNXLN SL/ANHY
6	5948.0-49.0	1.44	0.78	9.2	8.9	17.9	2.86	DOL BRN FNXLN SL/ANHY
7	5949.0-50.0	1.02	0.70	10.8	6.5	31.4	2.73	LM GRY VFXLN SL/ANHY
8	5950.0-51.0	4.41	3.55	10.6	7.2	34.5	2.73	LM GRY VFXLN SL/ANHY
9	5951.0-52.0	1.35	0.88	7.8	6.0	28.8	2.82	LM GRY VFXLN SL/ANHY SL/VUG
10	5952.0-53.0	7.54	5.46	9.5	11.8	30.3	2.82	LM GRY VFXLN SL/DOL-ANHY SL/VUG
11	5953.0-54.0	0.45	0.36	7.3	3.0	26.8	2.85	LM GRY VFXLN SL/DOL-ANHY SL/VUG
12	5954.0-55.0	1.43	1.19	11.2	8.7	48.6	2.79	LM GRY VFXLN SL/DOL-ANHY SL/VUG
13	5955.0-56.0	2.39	1.17	6.9	8.2	37.5	2.77	LM GRY VFXLN SL/DOL-ANHY SL/VUG
14	5956.0-57.0	0.48	0.46	7.7	5.0	30.1	2.73	LM GRY VFXLN SL/DOL-ANHY SL/VUG
15	5957.0-58.0	0.57	0.50	7.4	3.2	11.6	2.73	LM GRY VFXLN SL/DOL-ANHY SL/VUG
16	5958.0-59.0	0.70	0.33	7.2	5.3	15.0	2.77	LM GRY VFXLN SL/DOL-ANHY SL/VUG
17	5959.0-60.0	0.71	0.39	7.1	3.6	43.0	2.74	LM GRY VFXLN SL/DOL-ANHY SL/VUG
18	5960.0-61.0	0.70	0.51	6.6	3.9	35.0	2.73	LM GRY VFXLN SL/DOL-ANHY SL/VUG
19	5961.0-62.0	0.09	0.07	5.0	2.5	35.4	2.77	LM GRY VFXLN SL/DOL-ANHY SL/VUG
20	5962.0-63.0	0.26	0.24	8.1	2.4	24.2	2.74	LM GRY VFXLN SL/DOL-ANHY SL/VUG
21	5963.0-64.0	0.44	0.42	8.4	3.2	32.5	2.76	LM GRY VFXLN SL/DOL-ANHY SL/VUG
22	5964.0-65.0	0.17	*	7.2	2.1	32.8	2.76	LM GRY VFXLN SL/DOL-ANHY SL/VUG
23	5965.0-66.0	0.17	0.11	7.0	0.0	52.0	2.78	LM GRY VFXLN SL/DOL-ANHY SL/VUG
24	5966.0-67.0	0.24	0.16	7.0	0.0	48.4	2.74	LM GRY VFXLN SL/DOL-ANHY SL/VUG
25	5967.0-68.0	0.38	0.32	6.0	0.0	64.2	2.75	LM GRY VFXLN SL/DOL-ANHY SL/VUG

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

QUINTANA PETROLEUM CORPORATION
 DEADMAN CANYON # 1-28 FEDERAL

DATE : 24-APRIL-87
 FORMATION : PARADOX

FILE NO : 43806-3461
 ANALYSTS : DS/SP

FULL DIAMETER ANALYSIS-BOYLE'S LAW POROSITY

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM	AIR (MD) 90 DEG	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
26	5968.0-69.0	0.23	*	5.9	0.0	51.7	2.72	LM GRY VFXLN SL/DOL-ANHY SL/VUG
27	5969.0-70.0	0.55	*	6.7	0.0	59.1	2.72	LM GRY VFXLN SL/DOL-ANHY SL/VUG
28	5970.0-71.0	0.05	*	5.6	0.0	41.4	2.74	LM GRY VFXLN SL/DOL-ANHY SL/VUG
29	5971.0-72.0	0.44	0.41	7.3	0.0	41.3	2.76	LM GRY VFXLN SL/DOL-ANHY SL/VUG
30	5972.0-73.0	0.47	0.42	7.4	0.0	48.9	2.75	LM GRY VFXLN SL/DOL-ANHY SL/VUG
31	5973.0-74.0	0.20	0.16	6.3	0.0	53.0	2.75	LM GRY VFXLN SL/DOL-ANHY SL/VUG
32	5974.0-75.0	0.06	*	6.0	0.0	48.1	2.76	LM GRY VFXLN SL/DOL-ANHY SL/VUG
33	5975.0-76.0	0.11	*	7.4	2.5	44.8	2.72	LM GRY VFXLN SL/DOL-ANHY SL/VUG
	5976.0-03.0							CORE LOSS

UPPER ISMAY ZONE CORE # 2 6003-6038

34	6003.0-04.0	2.74	1.96	10.8	0.0	54.2	2.73	LM GRY VFXLN SL/DOL-ANHY SL/VUG
35	6004.0-05.0	4.54	2.15	7.9	0.0	43.1	2.74	LM GRY VFXLN SL/DOL-ANHY SL/VUG
36	6005.0-06.0	1.07	1.07	7.8	0.0	56.7	2.75	LM GRY VFXLN SL/DOL-ANHY SL/VUG
37	6006.0-07.0	2.31	1.43	9.8	0.0	48.0	2.78	LM GRY VFXLN SL/DOL-ANHY SL/VUG
38	6007.0-08.0	1.35	1.21	14.1	0.0	43.5	2.80	LM BRN VFXLN SL/ANHY-DOL P-P
39	6008.0-09.0	0.99	0.89	12.8	0.0	39.1	2.76	LM LTBRN VFXLN SL/ANHY-DOL P-P
40	6009.0-10.0	1.42	1.42	14.5	0.0	39.1	2.75	LM LTBRN VFXLN SL/ANHY-DOL P-P
41	6010.0-11.0	3.58	1.93	11.5	0.0	62.7	2.78	LM LTBRN VFXLN SL/ANHY-DOL P-P
42	6011.0-12.0	8.02	6.74	14.6	0.0	41.3	2.74	LM LTBRN VFXLN SL/ANHY-DOL P-P
43	6012.0-13.0	30.	29.	16.2	0.0	62.4	2.73	LM GRY VFXLN SL/ANHY SL/VUG
44	6013.0-14.0	14.	7.78	14.5	0.0	45.7	2.71	LM GRY VFXLN VUG SL/ANHY
45	6014.0-15.0	4.90	3.62	15.1	0.0	53.0	2.70	LM GRY VFXLN VUG SL/ANHY
46	6015.0-16.0	4.22	3.89	12.3	0.0	86.2	2.70	LM GRY VFXLN VUG SL/ANHY
47	6016.0-17.0	1.40	0.70	10.8	0.0	56.4	2.70	LM GRY VFXLN VUG SL/ANHY
48	6017.0-18.0	1.72	1.46	10.5	0.0	66.4	2.70	LM GRY VFXLN VUG SL/ANHY
49	6018.0-19.0	21.	10.	14.7	0.0	64.7	2.71	LM GRY VFXLN VUG SL/ANHY
50	6019.0-20.0	987.	16.	14.3	0.0	40.1	2.72	LM GRY VFXLN VUG SL/ANHY
51	6020.0-21.0	11.	9.40	12.9	0.0	29.0	2.71	LM GRY VFXLN VUG SL/ANHY

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

PAGE 3

DALLAS, TEXAS

QUINTANA PETROLEUM CORPORATION
 DEADMAN CANYON # 1-28 FEDERAL

DATE : 24-APRIL-87
 FORMATION : PARADOX

FILE NO : 43806-3461
 ANALYSTS : DS/SF

FULL DIAMETER ANALYSIS-BOYLE'S LAW POROSITY

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM	AIR (MD) 90 DEG	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
52	6021.0-22.0	5.75	5.38	10.5	0.0	44.3	2.71	LM GRY VFXLN VUG SL/ANHY
53	6022.0-23.0	14.	11.	11.6	0.0	67.8	2.71	LM GRY VFXLN VUG SL/ANHY
54	6023.0-24.0	40.	36.	11.2	0.0	46.4	2.71	LM GRY VFXLN VUG SL/ANHY
55	6024.0-25.0	3.39	2.87	10.8	0.0	45.2	2.73	LM GRY VFXLN VUG SL/ANHY
56	6025.0-26.0	44.	40.	10.5	0.0	57.4	2.72	LM GRY VFXLN VUG SL/ANHY
57	6026.0-27.0	14.	*	11.0	0.0	60.3	2.70	LM GRY VFXLN VUG SL/ANHY
58	6027.0-28.0	2.58	2.37	7.9	0.0	64.1	2.73	LM GRY VFXLN VUG SL/ANHY
	6028.0-38.0							CORE LOSS

* SAMPLE NOT SUITABLE FOR FULL DIAMETER ANALYSIS

Litton

Core Lab

SEP 21 1987

OIL ANALYSIS

for

Quintana Petroleum Corporation

RECEIVED JUL 21 1987

CONFIDENTIAL

Deadman Canyon 1-28 Well
Deadman Canyon Field
San Juan County, Utah
File Number: ARFL-87063

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Litton

Core Lab

10703 East Bethany Drive
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July 20, 1987

Quintana Petroleum Corporation
Prudential Plaza
1050 17th Street, Suite 400
Denver, CO 80265

Attention: Mr. John Wessels

Subject:

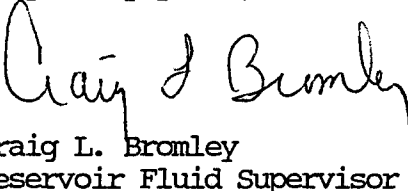
Oil Analysis
Deadman Canyon 1-28 Well
Deadman Canyon Field
San Juan County, Utah
File Number: ARFL-87063

Gentlemen:

Oil and gas collected from the subject well was delivered to our laboratory for testing. The composition of the oil samples were measured and the molecular weight, API gravity and density of the heavier fractions were determined. This data is presented on pages one and two. The API gravity, pour point and paraffin content of each oil sample were then determined. This data follows on page three. The composition of the gas was determined by routine chromatography through heptanes plus. This data is presented on page four.

Thank you for the opportunity to be of service to Quintana Petroleum Corporation. Should you have any questions pertaining to these test results or if we may be of further assistance, please do not hesitate to contact us at (303)751-9334.

Very truly yours,



Craig L. Bromley
Reservoir Fluid Supervisor

CLB/ssc
4 cc addressee

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Well Deadman Canyon 1-28

HYDROCARBON ANALYSIS OF OIL SAMPLE (5986-99')

<u>Component</u>	<u>Mol Percent</u>	<u>Weight Percent</u>	<u>Density, Gm/Cc @ 60°F.</u>	<u>°API @ 60°F.</u>	<u>Molecular Weight</u>
Hydrogen Sulfide	0.00	0.00			
Carbon Dioxide	0.00	0.00			
Nitrogen	0.00	0.00			
Methane	0.00	0.00			
Ethane	0.00	0.00			
Propane	0.32	0.06			
iso-Butane	0.12	0.03			
n-Butane	0.28	0.07			
iso-Pentane	0.62	0.19			
n-Pentane	1.00	0.31			
Hexanes	2.37	0.85			
Heptanes plus	<u>95.29</u>	<u>98.49</u>	0.8377	37.2	242
	100.00	100.00			

* Collected 6/11/87 @ 0700 hours.

HYDROCARBON ANALYSIS OF OIL SAMPLE (5940-53')*

<u>Component</u>	<u>Mol Percent</u>	<u>Weight Percent</u>	<u>Density, Gm/Cc @ 60°F.</u>	<u>°API @ 60°F.</u>	<u>Molecular Weight</u>
Hydrogen Sulfide	0.00	0.00			
Carbon Dioxide	0.00	0.00			
Nitrogen	0.00	0.00			
Methane	0.00	0.00			
Ethane	0.00	0.00			
Propane	1.06	0.25			
iso-Butane	0.51	0.16			
n-Butane	1.06	0.33			
iso-Pentane	1.63	0.63			
n-Pentane	2.95	1.14			
Hexanes	5.90	2.66			
Heptanes	11.46	5.90			
Octanes	13.46	7.72			
Nonanes	10.26	6.66			
Decanes	8.17	5.87			
Undecanes	6.06	4.78			
Dodecanes	4.74	4.09			
Tridecanes	4.80	4.51			
Tetradecanes	3.88	3.95			
Pentadecanes plus	<u>24.06</u>	<u>51.35</u>	0.8740	30.2	398
	100.00	100.00			

Properties of Heptanes plus fraction:

Density @ 60°F., Gm/Cc	0.8239
Gravity, °API @ 60°F.	40.1
Molecular Weight	203

Properties of Undecanes plus fraction:

Density @ 60°F., Gm/Cc	0.8553
Gravity, °API @ 60°F.	33.8
Molecular Weight	294

* Collected on 6/18/87 @ 1200 hours.

OIL PROPERTIES

Oil Sample from 5986-99' (Collected 6/11/87 @ 0700 hours)

API Gravity = 38.0°API @ 60°F.

Pour Point = 40°F.

Paraffin Content = 18.9% by weight

Oil Sample from 5940-53' (Collected 6/18/87 @ 1200 hours)

API Gravity = 42.6°API @ 60°F.

Pour Point = -5°F.

Paraffin Content = 29.0% by weight

HYDROCARBON ANALYSIS OF WELLHEAD GAS SAMPLE

<u>Component</u>	<u>Mol Percent</u>	<u>GPM</u>
Hydrogen Sulfide	0.00	
Carbon Dioxide	0.06	
Nitrogen	1.30	
Methane	84.65	
Ethane	10.14	2.712
Propane	2.76	0.760
iso-Butane	0.25	0.082
n-Butane	0.50	0.158
iso-Pentane	0.09	0.033
n-Pentane	0.09	0.033
Hexanes	0.07	0.027
Heptanes plus	<u>0.09</u>	<u>0.040</u>
	100.00	3.845

Calculated gas gravity (air=1.000) = 0.654

Calculated gross heating value = 1146 BTU per
cubic foot of dry gas at 14.73 psia and 60°F.

Collected at 834 psig and 60°F. on 6/19/87.

Cylinder Number: DEN-090

DEADMAN CANYON #1-28

QUINTANA PETROLEUM CORPORATION
Sec 28, T37S, R24E
SAN JUAN COUNTY, UTAH

RECEIVED

SEP 21 1987

DIVISION OF OIL
GAS & MINES

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Sec 28, T37S, R24E
SAN JUAN COUNTY, UTAH

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WELL DATA SUMMARY

WELL NAME: DEADMAN CANYON #1-28

OPERATOR: QUINTANA PETROLEUM CORPORATION

LOCATION: 500' FNL, 500' FWL, Sec 28, T37S, R24E

COUNTY: SAN JUAN

STATE: UTAH

AREA: CAVE CANYON

DRILLING CONTRACTOR: EXETER RIG #68

DRILLING ENGINEER: RAY KOEHN

WELL SITE GEOLOGY: DOUGLAS J. REDMOND

ELEVATION: GL 5712', KB 5724'

DEPTH LOGGED: 4700' - 6295'

DATE LOGGED: 4-17-87 to 4-25-87

TOTAL DEPTH: 6295' DRILLERS, 6292' LOGGERS

HOLE SIZE: 12 1/4" to 2038', 8 3/4" to

CORES: HYCALOG

MUD LOGGING COMPANY: TOOKE INTERNATIONAL

MECHANICAL LOGS: WELEX

WELL STATUS: AWAITING COMPLETION

DAILY DRILLING SUMMARY

<u>1987</u> <u>DATE</u>	<u>DEPTH</u>	<u>PROGRESS</u>	<u>HOURS</u> <u>DRILLING</u>	<u>MUD</u> <u>WEIGHT</u>	<u>VISC.</u>	<u>ACTIVITY</u>
4-17	Begin Logging at 4700'					
4-18	4957'	594'	23 1/4	Drilling w/ water		Drilling
4-19	5380'	423'	23 1/4	"	"	Drilling
4-20	5726'	346'	23 1/4	"	"	Drilling
4-21	5943'	217'	15 1/2	"	"	T.O. for core bbl
4-22	6031'	88'	9 3/4	"	"	Core #2
4-23	6203'	165'	10	"	"	Drilling
4-24	6295'	92'	4 3/4	"	"	Work on stuck pipe
4-25	6295'	0	0			E-logging

FORMATION TOPS

GL 5712', KB 5724'

<u>FORMATION</u>	<u>PROGNOSIS</u>	<u>ESTIMATED TOP</u>	<u>E-LOG</u>	<u>SUB-SEA</u>
DAKOTA	SURFACE		SURFACE	
CHINLE	1986'	2020'	2026'	+3698'
HERMOSA	4825'	4846'	4818'	+ 906'
ISMAY	5887'	5913'	5909'	- 185'
HOVENWEEP SHALE	6092'	6066'	6072'	- 348'
LOWER ISMAY		6102'	6114'	- 390'
GOTHIC SHALE	6172'	6150'	6157'	- 433'
DESERT CREEK	6197'	6180'	6183'	- 459'
CHIMNEY ROCK SHALE	6267'	6248'	6252'	- 528'
AKAH	6292'	6273'	6276'	- 552'
TD	6300'	6295'	6292'	- 568'

DEVIATION SURVEY

<u>DEPTH</u>	<u>SURVEY</u>	<u>CHANGE</u>
4803'	3/4°	
5304'	1°	+ 3/4°
5903'	1°	0

No survey was taken at TD

SHOW REPORT

WELL NAME: DEADMAN CANYON #1-28

AREA: CAVE CANYON COUNTY: SAN JUAN STATE: UTAH

SHOW No.: 1

FOOTAGE - from 5940' to 5943' Net ftg 3'

	DT	TOTAL GAS	CHROMATOGRAPH BREAKDOWN					other
			C ₁	C ₂	C ₃	C _{4I}	C _{4N}	
BEFORE	4	40	0.156	0.02	0.01			
DURING	0.75	1480	off scale	1.69	0.83	0.08		
AFTER		30	0.156	0.02	0.01			

LITHOLOGY TYPE & DESCRIPTION: Limestone- white, light gray, brown, crypto-
crystalline to coarsely microcrystalline, sucrosic, fossiliferous, very dolo-
mitized in part-largest crystals, friable, firm

POROSITY Est.: 12-14% vuggy and intercrystalline

STAIN DESCRIPTION: light to dark brown-black, live, occasionally dead asphaltic

FLUORESCENCE and CUT DESCRIPTION: 90% in sample, light yellow-blue fluorescence,
very faint yellow diffuse cut, when dry a strong streaming milky yellow cut

REMARKS: Upper Ismay Top 5913', Anhydrite 5917'. Circulate out 3' drilling
break to pick up the core barrel.

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SHOW REPORT

WELL NAME: DEADMAN CANYON #1-28

AREA: CAVE CANYON COUNTY: SAN JUAN STATE: UTAH

SHOW No.: 2

FOOTAGE - from 5943' to 6003' Net ftg 60'

	DT	TOTAL GAS	CHROMATOGRAPH BREAKDOWN					other
			C ₁	C ₂	C ₃	C _{4I}	C _{4N}	
BEFORE	0.75	30	0.156	0.02	0.01			
DURING	6-8	40-350	0.03-1.56	0.02- 0.32	0.007- 0.18	0.003- 0.02		
AFTER								

LITHOLOGY TYPE & DESCRIPTION: Dolomite - medium brown, medium gray, crypto-
crystalline to macrocrystalline, graded to limestone in part, fossiliferous,
sucrosic, friable, firm

POROSITY Est.: 10-12%

STAIN DESCRIPTION: medium to dark brown live, black asphaltic

FLUORESCENCE and CUT DESCRIPTION: bright yellow-blue fluorescence, fast
streaming yellow cut

REMARKS: Show is from Core #1, 5992-6003' not circulated out.

GEOLOGIC SUMMARY

Dead man Canyon #1-28 was the fourth well drilled in this field, and the third oil and gas producer. It was spudded April 10, 1987, and reached total depth at 6292' on April 23, 1987. E-logging was completed April 25, and 5 1/2 inch production casing was run into the hole. A two man mud-logging unit was utilized from 4700' to total depth. A full suite of E-logs were run for complete well evaluation. The entire well was drilled with water, which helped cut mud costs and increase the penetration rate. Using water reduces sample quality, and is a factor in correlation of formation tops and show descriptions.

Two cores were cut in the Upper Ismay productive interval from 5943' to 6038'. They were both broken up and eroded by the velocity of the drilling fluid, and neither cores were near a full recovery. The recovered intervals should help in reservoir analysis and depositional history of the algal carbonate mound.

Surface casing was set at 2041' in the top of the Chinle. The 9 5/8 inch. casing protects the sandstone aquifers up hole from any contaminants contained in the drilling fluids.

HERMOSA(HONAKER TRAIL): 4818' - 5919'

This top was picked on the first massive marine limestone found. The entire interval slowly grades from predominately continental deposition above, to entirely marine below. Limestones are interbedded with marlstones, gray siltstones, and dark brown to gray mica shales. Occasionally the siltstones and carbonates became sandy and clastic. From 5580' to 5909', several gas increases were logged in dark gray to black silty shales and sandy limestones.

No reservoir quality sandstones were found to necessitate further evaluation by testing.

UPPER ISMAY: 5909' - 6072'

Separating the Honaker Trail and Ismay interval is the Paradox Shale. This black shale was first seen at 5900' in the samples, and was gaseous and organic enough to cause a mud gas increase. The Ismay top was chosen on a gray limestone, followed immediately by two four foot thick anhydrites separated by limestone. At 5940'(drilling depth), a sharp penetration rate increase headlined the top of the porosity. Three feet were drilled, and samples were circulate out. A good oil and gas show was found(show #1), and the core barrel was picked up for core #1. Sixty feet of core were cut in at just over six minutes per foot average, indicating a porous interval. The core was broken up into pieces from 4 to 10 inches in length, and only 33' were recovered. The cause probably rests on the fact that the soft and porous rock was initially breaking on bedding planes and then turning slightly, causing the fractured rock to crumble. This enabled the drilling fluid velocity to erode the cored rock away from around the fractures and reduced the recovered core. This combination of factors are supported by; 1) the turning marks in the fractures between the upper and lower sections of core, 2) the roundness of the rock near the breaks indicating erosion, and 3) believing there were 25' of lost core down the hole, the core barrel was run back into the hole(nothing was touched until almost 3 feet from the bottom). This indicates the 25' of lost core were entirely eroded away and circulated out of the hole.

Core number 2 recovered 25 feet of the 35 feet cut, and the appearance of the core indicated the same problems were encountered the second time. The core descriptions are described in detail in the report, and in general were as follows: 5943-5945' - Limestone; gray, very dolomitized, slight earthy appearance, vuggy, predominantly 1-5 mm, scattered 1-3 cm, good strong oil odor, fluorescence, and staining. 5945-5948' - Limestone; gray, dolomitic, some anhydritic fill, earthy appearance, slightly less porous, good oil odor, staining, fluorescence, interbedded with brown dolomite streaks. 5948-5960' - Limestone; gray, brown, cryptocrystalline to finely microcrystalline, dolomitic, argillaceous, earthy texture, rubbly appearance in part, some anhydrite fill, some moldic vuggy porosity, dark patchy staining, strong oil odor, vugs are usually 2-6 mm, some scattered 2-3 cm, oil is entirely flushed out of core, however several tight streaks 2-5 inches thick are medium gray, earthy, argillaceous, mudstone. Note; at 5948', the core lost the even fluorescence and strong streaming cut due to lower porosity. 5960-5965' - Limestone; gray, dolomitic, thinly bedded mudstone layers separate fossils, dolomitic, \emptyset intervals, some anhydrite fill is present here, the core has strong oil odor, oil staining, and patchy fluorescence. The oil show is restricted to intervals of higher \emptyset . 5965-5970' - Limestone; gray, dolomitic, argillaceous, earthy, anhydrite fill, tight, vugs are smaller in size, predominately pin point, some oil staining, however oil odor is noticeably weaker, spotty fluorescence. 5970-5976' - Limestone; gray, some crystalline appearance, earthy, argillaceous, dolomitized between thinly bedded mudstone, fossils with crinoids, some algal debris, numerous shelled fossils. The oil show was very weak in the tight streaks, however the better porosity enjoyed good oil odor, staining, patchy fluorescence, and strong streaming cut. Note; the Ivanovia algal remains were present in varying amounts, although not as prevalent as one might expect. In local intervals of the core one could observe local stacks of algal blade porosity. Some of the fossil debris were dolomitized beyond recognition or replaced with anhydrite, especially from 5949-5976'.

Core number two was laid down and the footages were not certain, so they were numbered 1-25. A general description is as follows: 1-3' - Limestone; gray, argillaceous, graded to mudstone, anhydritic void fill, fossils with crinoid stems and heads, some algal blade porosity, fair to good vuggy \emptyset , some intercrystalline \emptyset , spotty staining and fluorescence, very weak oil odor. 3-4' - Mudstone; medium to dark gray, dolomitic, anhydritic fill, tight earthy, trace of small vugs, no show. 4-5.5' - Mudstone; dark gray, shaly, calcareous, anhydritic, soft. 5.5-8.5' - Limestone; gray, argillaceous, mudstone matrix, anhydritic fill, tight, some scattered vuggy streaks, very poor intercrystalline \emptyset , no odor, spotty dead oil staining, dull gold fluorescence, dull gold residual cut. 8.5-9.5' - Limestone; medium gray, argillaceous, mudstone matrix, fossiliferous, crinoids, some algal debris, anhydritic void fill, core is becoming more porous, fair vuggy \emptyset with some preferential leaching evident, poor intercrystalline \emptyset , no oil odor, mineral fluorescence. 9.5-25' Limestone; medium gray, cryptocrystalline to very finely microcrystalline, occasionally coarse microcrystalline, locally dolomitic, some mudstone matrix, trace anhydrite fill, very fossiliferous, very good vuggy \emptyset , vugs up to 2 cm, core is flushed and drilling fluid was present in freshly broken faces, indicating good permeability, no oil odor with very light brown staining in vugs, dull gold fluorescence and very diffuse residual dull gold cut.

E-log evaluation indicated an interval of 10 feet from 5940-5950' that was very porous and oil bearing. This correlates with the best porosity and oil show in the core. The interval 5950-6005' was fairly tight, with porosities averaging only 6 to 8 percent. Resistivities on the DIL run between 10 and 25 ohms. During coring gas increases occurred at 5950', 5956', 5962', 5984', and 5992'. This interval contained a series of thin

hydrocarbon bearing reservoirs separated by tight intervals of mudstone and anhydrite fill. At 6006' the deep induction curve begins to duck down to 2 to 3 ohms, indicative of an oil-water contact. However, it begins a comeback to higher resistivities at 6016', which is in 10 percent porosity. This raises the possibility of oil below 6010'; We know there was an impermeable bed of mudstone at the top of the second core from 6003-6008.5, which could create an oil bearing reservoir from 6012-6026' below. Testing behind the production casing should provide the answers.

Looking at the Ismay from an overall view, the carbonate has been separated at 6045' by a dolomitic mudstone creating the appearance of two mounds stacked up. This is typical of the other three wells drilled in the field. In this well the upper portion was nearly 20' thicker than the #2-20 offset well. The lower section here was only 20' thick as compared to over 60' in the #2-20. This suggests that the #1-28 is near the middle of the upper algal ridge, where the oil production has been found. Supporting this is the fact that the underlying Hovenweep shale has increased thickness over the offset #1-20 well. This weight would cause the algal mound to be sinking into soft sediments below, hence more carbonate buildup during the depositional period.

HOVENWEEP SHALE AND LOWER ISMAY: 6072' - 6157'

This shale was black, carbonaceous, and soft, providing an easy sample pick. The Lower Ismay was chosen on a medium gray limestone following the black shale. It contained about 15' of massively bedded anhydrite and light to medium gray limestone below. No significant shows were recorded, however the limestone does exhibit some limited porosity.

GOTHIC SHALE: 6157' - 6183'

Normally this black shale is the most consistent shale in the basin, and here was no exception. An accurate sample top was hard to see because of poor sample quality, and correlation was done primarily with penetration rate and gas increases common to this section of the wells. The shale was gaseous and drilled slightly faster than the overlying Ismay.

DESERT CREEK: 6183' - 6252'

This top was picked on penetration rate and gas increases. The interval consisted of dolomitic mud and siltstone interbedded with massive anhydrites. The lower interval can be porous and overpressured in places, so care was taken to watch for any drilling breaks and was immediately checked for flow to protect the rig from a blow out. No economic shows were found in the Desert Creek interval.

CHIMNEY ROCK SHALE: 6252' - 6276'

This soft black shale drilled faster than the hard carbonates above, making it an easy zone to pick out. The shale was organic, gaseous, and considered to be among the source beds for hydrocarbons present in the area.

AKAH: 6276' - TD

The slower penetration rate and medium gray limestone indicated this top. The well reached TD here instead of going further into the Paradox Salt. This reduced any high chlorides in the drilling fluid, and the possibility of encountering a high pressure salt water flow.

SAMPLE DESCRIPTIONS

4700-4720	80%	<u>Siltstone</u> - red to brown, dark gray, calcareous to limy, micaceous, sandy in part, brittle, firm
	10%	<u>Sandstone</u> - clear, gray, white, very fine to fine grain, angular, calcareous, friable, firm, some unconsolidated
	10%	<u>Limestone</u> - white, light gray, cryptocrystalline, chalky, firm
4720-4750	50%	<u>Siltstone</u> - dark red to brown, dark gray, calcareous, micaceous, firm
	40%	<u>Shale</u> - medium gray to green, dark red to brown, siliceous in part, calcareous in part, occasionally micaceous, fissile, firm
	10%	<u>Limestone</u> - as above, red to white, argillaceous, soft
4750-4780	70%	<u>Siltstone</u> - as above
	20%	<u>Limestone</u> - as above, light gray, cryptocrystalline to very finely microcrystalline, dense, medium hard
	10%	<u>Sandstone</u> - clear, orange, white, fine grain
4780-4810	70%	<u>Siltstone</u> - as above, becoming medium to dark gray, limy to marly, micaceous, brittle, firm
	30%	<u>Limestone</u> - white, light to medium gray, cryptocrystalline to very finely microcrystalline, argillaceous, marly, occasionally sandy, dense, firm to medium hard
4810-4840	50%	<u>Sandstone</u> - white, clear, light gray, rose, very fine to medium grain, glauconitic, calcareous to siliceous, subangular to subrounded, unconsolidated and very friable
	50%	<u>Siltstone</u> - as above
		Trace Limestone
4840-4870	60%	<u>Sandstone</u> - as above, NFSOC
	40%	<u>Shale</u> - dark gray, medium gray, graded to marlstone, smooth, brittle, firm to medium hard
		Trace Limestone - 5%, medium gray, argillaceous, marly
4870-4900	80%	<u>Limestone</u> - light gray, medium gray, white, cryptocrystalline, very finely microcrystalline, argillaceous in part, sandy, dense, firm, medium hard
	10%	<u>Sandstone</u> - as above
	10%	<u>Shale</u> - as above
4900-4960	90%	<u>Limestone</u> - light to medium gray, tan, cryptocrystalline, very finely microcrystalline, chalky in part, siliceous, slightly micaceous, dense, medium hard
	10%	<u>Shale</u> - dark gray to black, calcareous, fissile, firm
		Trace Sandstone
4960-4990	70%	<u>Limestone</u> - as above, medium gray, argillaceous, chalky, firm
	20%	<u>Chert</u> - tan to dark brown, translucent
	10%	<u>Shale</u> - as above

4990-5020	90%	<u>Limestone</u> - light to medium gray, brown, cryptocrystalline to very finely microcrystalline, argillaceous, siliceous in part, dense, medium hard to hard
	10%	<u>Shale</u> - as above
		Trace Sandstone, Chert
5020-5050	60%	<u>Limestone</u> - as above, medium gray, argillaceous, firm
	30%	<u>Siltstone</u> - medium gray to dark gray, red to brown, marly, micaceous, firm, brittle
	10%	<u>Shale</u> - medium to dark gray, smooth, calcareous, waxy, firm
5050-5080	100%	<u>Limestone</u> - medium gray, light gray, some dark gray, very finely microcrystalline to cryptocrystalline, argillaceous, marly, occasionally sandy, micaceous, dense, medium hard, firm Trace Shale, Siltstone
5080-5110	80%	<u>Limestone</u> - light to medium gray, cream, dark gray, marly to argillaceous, dense, medium hard, firm
	20%	<u>Shale</u> - dark gray, calcareous, silty, firm, brittle
5110-5140	60%	<u>Limestone</u> - white, light gray, medium gray, cryptocrystalline to very finely microcrystalline, argillaceous in part, fossiliferous in part, debris replaced with anhydrite, chalky in part, some recrystallized structure, firm, medium hard, dense
	40%	<u>Shale</u> - dark gray, medium gray, graded to marlstone, limy, blocky, fissile, firm, medium hard
5140-5170	60%	<u>Shale</u> - dark red to brown, dark gray, calcareous, silty, firm
	30%	<u>Siltstone</u> - dark red to brown, dark gray, calcareous, micaceous, firm, medium hard
	10%	<u>Limestone</u> - as above, medium gray, argillaceous
5170-5200		Very Poor Sample
	100%	<u>Shale</u> - as above
5200-5230	70%	<u>Limestone</u> - light to medium gray, white, tan, mottled in part, cryptocrystalline to very finely microcrystalline, marly, lithic in part, dense, firm, medium hard
	30%	<u>Shale</u> - medium to dark gray, marly, brittle, firm
5230-5260	60%	<u>Limestone</u> - as above
	40%	<u>Shale</u> - as above
5260-5290	80%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above
5290-5310	80%	<u>Limestone</u> - white, light to medium gray, some tan, cryptocrystalline, occasionally very finely microcrystalline, siliceous, sandy in part, chalky, occasionally slightly argillaceous, firm, medium hard to hard, dense
	20%	<u>Shale</u> - medium to dark gray, marly, silty, firm, medium hard
5310-5370	60%	<u>Limestone</u> - as above, some fossiliferous, tan, translucent
	40%	<u>Shale</u> - as above

5370-5440	90%	<u>Limestone</u> - medium gray, argillaceous, marly in part, fossiliferous, slightly dolomitic, medium hard, dense
	10%	<u>Shale</u> - as above
5440-5470	50%	<u>Limestone</u> - white, light to medium gray, cryptocrystalline, occasionally very finely microcrystalline, argillaceous in part, marly, some chalky, fossiliferous, dense, firm, medium hard
	50%	<u>Shale</u> - medium to dark gray, limy, argillaceous, firm to medium hard
5470-5530	90%	<u>Limestone</u> - light to medium gray, white, cryptocrystalline, slightly siliceous in part, argillaceous to marly, dense, medium hard, soft
	10%	<u>Shale</u> - as above
5530-5560	100%	<u>Limestone</u> - as above, tan, translucent, anhydritic, argillaceous in part, dense, firm, medium hard Trace <u>Shale</u> - 5%
5560-5590	80%	<u>Shale</u> - dark gray to black, calcareous, marly, silty, fissile, firm
	20%	<u>Limestone</u> - as above
5590-5620	60%	<u>Limestone</u> - light to medium gray, tan, cryptocrystalline to very finely microcrystalline, argillaceous, occasionally fossiliferous, sandy in part, siliceous, firm, medium hard, hard, dense
	40%	<u>Shale</u> - as above, some siliceous and cherty Trace <u>Chert</u> - dark brown, clear to white
5620-5650	50%	<u>Limestone</u> - medium gray, tan, some white, cryptocrystalline, argillaceous, marly, micaceous, dolomitic, siliceous, dense, medium hard, firm
	50%	<u>Shale</u> - dark gray, medium gray, marly, brittle, firm, medium hard Trace <u>Chert</u> - tan
5650-5680	90%	<u>Shale</u> - dark gray, medium gray, very calcareous to limy, silty, slightly carbonaceous, blocky, medium hard, firm
	10%	<u>Limestone</u> - as above
5680-5740	70%	<u>Limestone</u> - light to medium gray, tan, white, cryptocrystalline, anhydritic, fossiliferous, fossiliferous, chalky, some marly, firm, medium hard
	30%	<u>Shale</u> - as above
5740-5800		Very Poor Sample
	80%	<u>Limestone</u> - as above
	20%	<u>Shale</u> - as above, medium gray, siliceous in part, waxy, medium hard
5800-5810	90%	<u>Shale</u> - dark gray, black, calcareous, silty, marly, slightly carbonaceous, firm, medium hard
	10%	<u>Limestone</u> - as above
5810-5820		Very Poor Sample
	70%	<u>Limestone</u> - medium gray, light gray, tan, white, cryptocrystalline, argillaceous, dense, medium hard
	30%	<u>Shale</u> - as above

5820-5830	90%	<u>Limestone</u> - as above, tan, siliceous, hard
	10%	<u>Shale</u> - as above
		Trace Chert - tan, brown, translucent
5830-5860	90%	<u>Limestone</u> - as above, tan, siliceous, fossiliferous, hard
	10%	<u>Shale</u> - as above
		Trace Chert - 5%, white, clear, tan
5860-5870	100%	<u>Limestone</u> - tan, medium gray, light gray, cryptocrystalline, argillaceous to marly, dolomitic, dense, medium hard, hard
5870-5900		Very Poor Sample
	100%	<u>Limestone</u> - as above, becoming darker and more marly
5900-5910	80%	<u>Shale</u> - black, dark gray, calcareous, carbonaceous, firm, fissile
	20%	<u>Limestone</u> - as above
5910-5920	70%	<u>Shale</u> - as above
	20%	<u>Limestone</u> - medium gray, brown, cryptocrystalline to very finely microcrystalline, silty, marly, dense, medium hard
	10%	<u>Anhydrite</u> - white, crystalline appearance
	Note:	Drilling fluid pH was 8-8.5, low enough to cause the anhydrites to ionize and go into solution with no significant amount reaching the samples.
5920-5940	50%	<u>Shale</u> - as above
	50%	<u>Limestone</u> - medium gray, light gray, cryptocrystalline, occasionally very finely microcrystalline, anhydritic, trace fossiliferous, slightly dolomitic, dense, medium hard, firm
		Trace Anhydrite
5940-5943	70%	<u>Limestone</u> - white, tan, very fine to finely microcrystalline, dolomitic, slightly anhydritic, sucrosic, friable, firm, good vuggy and intercrystalline \emptyset , brown staining, bright yellow fluorescence, fast streaming yellow cut
	30%	<u>Shale</u> - as above
5943-6038		Cored Interval
6038-6040		Very Poor Sample
	100%	<u>Limestone</u> - white, cryptocrystalline, firm
6040-6070	100%	<u>Limestone</u> - white, light gray, tan, cryptocrystalline, very fine to finely microcrystalline, anhydritic, fossiliferous, chalky, slightly argillaceous in part, firm, medium hard, very poor intercrystalline and vuggy \emptyset , trace brown and dead black stain, yellow mineral fluorescence, no oil fluorescence or cut
6070-6110	90%	<u>Shale</u> - black, dark gray, calcareous, carbonaceous, silty, fissile to blocky, firm
	10%	<u>Limestone</u> - as above
6110-6120	60%	<u>Limestone</u> - medium gray, light gray, white, cryptocrystalline, argillaceous, dolomitic, dense, medium hard
	30%	<u>Shale</u> - as above
	10%	<u>Anhydrite</u> - white, soft

6120-6130	100%	<u>Limestone</u> - light to medium gray, cryptocrystalline, very finely microcrystalline, marly in part, pyritic, anhydritic, slightly siliceous, dolomitic, firm, medium hard Trace Anhydrite - 5%
6130-6150	100%	<u>Limestone</u> - as above, medium gray, trace very poor inter-crystalline \emptyset , NFSOC Trace Anhydrite
6150-6180	100%	<u>Shale</u> - black, calcareous, carbonaceous, silty, firm Trace Limestone
6180-6190	70%	<u>Dolomite</u> - medium gray to brown, cryptocrystalline, very finely microcrystalline, marly, silty, dense, firm, medium hard
	30%	<u>Shale</u> - as above
6190-6210		Very Poor Sample
	80%	<u>Dolomite</u> - as above
	10%	<u>Anhydrite</u> - white, translucent
	10%	<u>Shale</u> - as above
6210-6240		Very Poor Sample
	100%	<u>Dolomite</u> - medium gray, light gray, cryptocrystalline, marly, graded to mudstone, anhydritic, medium hard, hard, dense Trace Shale, Anhydrite
		Samples are very poor, no show was found in the Lower Desert Creek \emptyset interval.
6240-6250	70%	<u>Shale</u> - dark gray to black, calcareous, carbonaceous, silty, medium hard, firm
	30%	<u>Dolomite</u> - as above
6250-6270	100%	<u>Shale</u> - as above
6270-6280	90%	<u>Limestone</u> - medium gray, light gray, cryptocrystalline, very marly, argillaceous, dolomitic, dense, medium hard, hard
	10%	<u>Shale</u> - as above
6280-6295	80%	<u>Limestone</u> - as above
	10%	<u>Shale</u> - as above
	10%	<u>Anhydrite</u> - white, crystalline, translucent

CORE #1

Cut 60', from 5943' to 6003', recovered 33'
Core chip description:

- 5943-5944 Limestone - medium gray to brown, cryptocrystalline to medium microcrystalline, dolomite streakd throughout (brown), sucrosic, friable, fair intercrystalline \emptyset , good vuggy \emptyset predominately 1-5 mm, occasionally scattered vugs up to 3 cm, some indicate preferential leaching of fossil debris, strong hydrocarbon odor, medium to dark brown staining, patchy to even yellow fluorescence, streaming milky yellow cut
- 5944 Dolomite - medium brown, gray, very fine to finely microcrystalline, very fossiliferous, sucrosic, friable, crumbly, good intercrystalline \emptyset , exhibits preferential leaching of plant debris, vugs predominately 1-3 mm, occasionally scattered vugs up to 2-3 cm, very strong oil odor, dark brown to black oil staining, patchy yellow-blue fluorescence, streaming milky yellow cut
- 5945 Dolomite - medium brown, dark brown, cryptocrystalline, very finely microcrystalline, becoming earthy in part, argillaceous in part, anhydritic fill is present, sucrosic, friable, firm, core has generally tighter appearance, vugs are smaller, very strong oil odor, medium to dark brown oil staining, patchy to even yellow-blue fluorescence, streaming milky yellow cut
- 5946 Dolomite - as above, less fossil content, anhydritic fill present, good oil show, CORE has flushed appearance, no bleeding oil or gas
- 5947 Dolomite - medium gray, medium brown, cryptocrystalline to very very finely microcrystalline, trace gray mudstone, abundant anhydritic fill, some argillaceous, earthy appearance, sucrosic, friable, fair intercrystalline \emptyset , poor to fair vuggy \emptyset , strong oil odor, dark brown staining, patchy yellow-blue fluorescence, strong yellow cut
- 5948.3 Anhydrite - medium gray to clear, medium gray to clear, medium hard, includes dolomite streaks, medium brown, sucrosic, friable, fair to good intercrystalline \emptyset , fair pin point to 3 or 4 mm vuggy \emptyset , strong oil odor, even medium brown staining in dolomite rhombs, good oil odor, medium to dark brown scattered staining, scattered pin point to patchy yellow-blue fluorescence, it is even along dolomite streaks, weak streaming yellow cut
- 5949.7 Limestone - medium gray, very fine to finely microcrystalline, cryptocrystalline, fossiliferous, medium gray mudstone is thinly interbedded with dolomitic limestone, limestone is porous, poor to fair vuggy \emptyset , very poor intercrystalline \emptyset , staining is predominately black and asphaltic, some brown and live, yellow-blue fluorescence, weak streaming yellow cut, note; core appears tight, however is flushed of oil and gas, and was not bleeding when freshly lain down

- 5950.5, 5951.7 Limestone - as above, interbedded with mudstone, vugs are 0.5 to 1 mm, predominately irregular shaped although some is moldic \emptyset , even black dead staining along vugs, yellow fluorescence, weak streaming cut
- 5952.7 Mudstone - medium gray, anhydritic, marly, thin, dolomite streaks throughout, druzy vugs with dolomite rhombs, patchy brown staining, yellow fluorescence, weak streaming cut
- 5953.2 Limestone - medium gray to tan, cryptocrystalline, marly, graded to mudstone matrix, fossiliferous, porous dolomite streaks throughout, druzy with rhombohedral crystals, poor to fair vuggy \emptyset , very poor intercrystalline \emptyset , even brown staining in vugs, yellow fluorescence, weak streaming cut
- 5953.7 Carbonate Mudstone - medium gray, marly, slightly dolomitic, thin dolomite streaks throughout, very dolomitized and porous, fossiliferous debris are replaced with anhydrite, poor vuggy \emptyset , very poor intercrystalline \emptyset , patchy fair yellow fluorescence, weak streaming cut
- 5954.8 Carbonate Mudstone - as above, dolomite streaks are more common, very fossiliferous, crinoid stems, algal blades are leached, vugs are small, evenly stained, yellow fluorescence, weak yellow cut
- 5955.7 Carbonate Mudstone - as above, graded to marlstone, very fossiliferous, increase of crinoids, some leached some stacked algal blade leaching evident, predominately tight appearance, even brown to black staining along \emptyset faces, yellow fluorescence, weak streaming cut
- 5956.6 Carbonate Mudstone - medium gray, graded to marlstone, becoming earthy and argillaceous, slightly fossiliferous, some carbonate streaks have been dolomitized and leached, irregular shapes, very poor vuggy \emptyset , spotty to patchy staining along porous faces, yellow fluorescence, weak diffuse to streaming cut
- 5957.6 Carbonate Mudstone - as above, becoming more limy, fossiliferous, some algal blade leaching, anhydritic in part, dolomitic, poor to fair vuggy \emptyset , spotty to patchy staining in vugs, tight appearance, some vugs are not stained at all, yellow fluorescence, weak diffuse to streaming cut
- 5958.5 Limestone - medium gray, light gray, cryptocrystalline, some very finely microcrystalline, dolomitic in part, anhydritic in part, some matting or bedding planes are visible and porous, marly in part, predominately dense, medium hard, poor to fair vuggy \emptyset , even brown staining in vugs, light yellow fluorescence, weak streaming cut
- 5959.6 Limestone - medium gray, cryptocrystalline, some very finely to medium microcrystalline, interbedded with some mudstone, very fossiliferous, dolomitic, anhydritic, dense, medium hard, poor to fair vuggy \emptyset , brown to black staining in vugs which are druzy with dolomite rhombs, light yellow fluorescence, weak yellow cut
- 5960.6 Limestone - as above, increase of algal blade leaching, anhydritic, dolomitic, fair vuggy \emptyset , live brown staining in vugs, yellow fluorescence, moderate streaming yellow cut

- 5961.6 Carbonate Mudstone - medium gray, limy, some vuggy \emptyset , predominately tight
- 5962.4 Limestone - medium gray, light gray, cryptocrystalline, some very finely microcrystalline, irregularly interbedded with mudstone, slightly anhydritic, dolomitic in part, some fossiliferous, predominately tight, poor vuggy \emptyset , brown staining, yellow fluorescence, weak diffuse to streaming cut
- 5963.4 Limestone - as above, very finely microcrystalline, crinoid stems, partially leached, poor vuggy \emptyset , very poor intercrystalline \emptyset , light brown staining, dull to bright yellow fluorescence, weak streaming yellow cut
- 5964.3 Limestone - medium gray, cryptocrystalline, fossiliferous, leached crinoid plant debris, occasional algal blade leaching, fair to good vuggy \emptyset , light to dark brown staining, yellow fluorescence, streaming yellow cut
- 5965.3 Carbonate Mudstone - medium gray, light gray, very limy, anhydritic, argillaceous, dolomite streaks throughout, fossiliferous, crinoid stems, algal blades (some very leached), poor to fair vuggy \emptyset , vugs are druzy with dolomite rhombs, light to dark brown staining in the vugs, patchy yellow fluorescence, streaming yellow cut
Note: Strong oil odor was lost at this point on the core.
- 5966.3 Limestone - light gray, medium gray, cryptocrystalline, anhydritic, slightly fossiliferous, dolomitic, slightly fossiliferous, occasionally marly and argillaceous, tight, dense, medium hard, slight leaching is evident, very poor vuggy \emptyset , very poor intercrystalline \emptyset , spotty yellow fluorescence, diffuse cut
- 5967.0 Mudstone - medium gray, limy, carbonate streaks throughout, argillaceous, anhydritic, dense, tight, medium hard, trace vuggy \emptyset , mineral fluorescence, no cut

Note: 5967 to 5976 The core had a very weak show except for thin, very porous streaks that contained good odor, even staining, yellow fluorescence, and streaming yellow cut.
- 5969.6, 5972.7 Mudstone - as above, dolomitic, argillaceous, abundant anhydrite fill, graded to limestone
- 5973.7 Limestone - medium gray, cryptocrystalline, anhydritic, marly in part, fossiliferous, algal blades, some shelled fossils, occasional crinoids, predominately tight, medium hard, poor to fair vuggy \emptyset , occasionally moldic (fossils), spotty to pin point yellow fluorescence, weak diffuse cut
- 5975.0 Limestone - as above, fair to good vuggy \emptyset , dark brown staining, good yellow fluorescence, streaming yellow cut
- 5976.0 Carbonate Mudstone - medium gray, argillaceous, dolomitic streaks, abundant fossil debris, brachiopods, crinoids, algal blades, fair vuggy \emptyset , moldic leaching, vugs are druzy with dolomite rhombs, brown staining in vugs, yellow fluorescence, streaming milky yellow cut

CORE #2

Note: Core had no oil odor.

- 6003 Limestone - medium gray, light gray, cryptocrystalline, very fine to coarsely microcrystalline, argillaceous in part, micrite, fossils (crinoids) and algal blade debris, replaced with dolomite and anhydrite, predominately tight, poor to fair vuggy \emptyset , very poor to poor intercrystalline \emptyset , patchy light brown staining in vugs, dull gold fluorescence, very slow weak dull yellow cut
- 6004.2 Limestone - as above, argillaceous, dolomite streaks throughout, very finely microcrystalline, light brown staining, dull gold fluorescence, weak diffuse dull gold fluorescence
- 6005 Mudstone - medium gray, argillaceous, carbonate streaks throughout that are dolomitized and brown, very fine to coarsely microcrystalline, sucrosic in part, fossiliferous, anhydritic, predominately dense, drusy with dolomite/calcite rhombs, poor vuggy \emptyset , very poor to poor intercrystalline \emptyset , spotty light brown staining, dull gold fluorescence, weak diffuse dull yellow cut
- 6005.9 Mudstone - medium gray, argillaceous, limy, dense, some thinly laminated carbonate streaks, no show
- 6007 Mudstone - medium gray to brown, shaly, dolomitic, fossiliferous, anhydritic, dense, medium hard
- 6008.7 Limestone - medium gray, cryptocrystalline, very fine to coarsely microcrystalline, large rhomb crystals in very finely microcrystalline matrix, fossil debris (broken up), algal blade leaching, very fine moldic vugs, very light brown staining, dull gold fluorescence, dull gold weak cut
- 6009.7 Limestone - as above, more earthy, argillaceous, marly, anhydrite void fill, abundant leached algal blades
- 6011 Mudstone - medium gray, argillaceous, anhydritic, limy, slightly fossiliferous, trace vuggy \emptyset , NFSOC
- 6012 Limestone - medium gray, light gray, tan, very fine to finely microcrystalline, cryptocrystalline, very fossiliferous, dolomitic, sucrosic, earthy, firm, fair vuggy \emptyset , poor to fair intercrystalline \emptyset , very light brown staining, patchy dull gold fluorescence, very slow weak diffuse cut (probably residual)
- 6013.3 Limestone - as above, very little moldic \emptyset , predominately irregular vugs and occasionally are very dolomitized

Note: Core was very porous and permiable from this footing to base, drilling fluid had invaded throughout and flushed the core.

- 6014.3 Limestone - as above, residual oil show
- 6017-6019 Limestone - as above, argillaceous and with a mudstone appearance, good vuggy \emptyset , dull gold fluorescence, weak diffuse cut
- 6019-6022 Limestone - as above, medium gray, less marly, dolomitic, sucrosic, earthy, anhydritic, good vuggy \emptyset , large dolomite rhombs, dull gold fluorescence, weak diffuse cut
- 6022.3-6028 Limestone - medium gray, light gray, cryptocrystalline, very fine to coarsely microcrystalline, slightly fossiliferous, dolomitic, sucrosic, anhydritic, excellent vuggy \emptyset , fair intercrystalline \emptyset , light brown staining, pin point dead oil staining, dull gold fluorescence, slow diffuse yellow cut

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

3. LEASE DESIGNATION AND SERIAL NO.

U-49678

8. IF INDIAN, ALIAS OR TRIBAL NAME

N/A

7. UNIT AGREEMENT NAME

N/A

5. FARM OR LEASE NAME

DEADMAN CANYON FEDERAL

9. WELL NO.

#1-28

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Section 28, T37S-R24E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

DATE ISSUED

1/21/87

14. PERMIT NO.

43-037-31306

15. DATE SPUDDED

4/10/87

16. DATE T.D. REACHED

4/23/87

17. DATE COMPL. (Ready to prod.)

SI 6/19/87

5712'

20. TOTAL DEPTH, MD & TVD

6295'

21. PLUG. BACK T.D., MD & TVD

5971'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0'-6295'

N/A

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

Information held confidential.

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

DIL/Sonic/SP/GR/Cal; CNL/CDL/GR/Cal; Dipmeter; DLL/MG/Cal/SP/GR; CBL/VDL

27. WAS WELL CORED

Yes

29. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	40#	2040.33'	12 1/4"	540 sxs Lite, 200 sxs "B"	None
5 1/2"	15.5# & 17#	6297.29'	8 3/4"	200 sxs Thixotropic	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A					2 7/8"	5924.84'	5908.71'

31. PERFORATION RECORD (Interval, size and number)

Information held confidential

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

SEP 21 1987

33.* PRODUCTION

DATE FIRST PRODUCTION 6/16/87-flow test
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing

WELL STATUS (Producing or shut-in) SI

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Will be sold

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

J. Williams

TITLE

Production Technician

DATE

9/14/87

Utah DOGM

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS			
				NAME	MEAS. DEPTH	LOG TOP	TRUE VERT. DEPTH
CORE: 5943'-6003' - recovered 35' 6003'-6038' - recovered 25'				Chinle	2026'		
				Hermosa	4818'		
No DST's				Ismay	5909'		
				Hovenweep Shale	6072'		
				Lower Ismay	6114'		
				Gothic Shale	6157'		
				Desert Creek	6183'		
				Chimney Rock Sh	6252'		
				Akah	6276'		
				T.D.	6292' - Logger		
					6295' - Driller		

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

AUG 12 1988

SUNDRY NOTICES AND REPORTS ON AUG 18 1988

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

DIVISION OF
OIL, GAS & MINING

DIVISION OF
OIL, GAS & MINING

WELL ☐ GAS WELL ☐ OTHER ☐ CENTRAL TANK BATTERY

2. NAME OF OPERATOR
QUINTANA PETROLEUM CORPORATION (303) 628-9211

3. ADDRESS OF OPERATOR
1050 - 17th Street, Suite 400, Denver, Colorado 80265

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface

Central Tank Battery located in Section 20, T37S-R24E

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, CR, etc.)

Form approved
Budget Bureau No. 1004-011
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-57469

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

DEADMAN CANYON FEDERAL

9. WELL NO.

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Section 20, T37S-R24E

12. COUNTY OR PARISH 13. STATE

San Juan Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANT

(Other)

NTL-2B

X

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

In accordance with NTL-2B, Quintana Petroleum Corporation requests permission to store produced water from the Deadman Canyon wells (Deadman Canyon Fed. #1-20, #2-20 & #1-28) in two tanks at the central battery location and dispose of the water at an approved disposal site. An average of ~~±120~~ barrels of water is produced monthly by these wells. A water analysis is being done and will be forwarded when available.

Note: To date, four loads of produced water have been removed from the tanks as follows:

Date	Amount	Hauled By	Disposal Pit
4/25/88	200 bbls	Wrightway Trucking Fluids Division	Hatch Disposal Hatch, Utah
5/29/88	210 bbls	Same	Same
7/14/88	120 bbls	Same	Same
8/9/88	60 bbls	Same	Same

Copies of the tickets can be provided if required.

18. I hereby certify that the foregoing is true and correct

SIGNED Amul Williams

TITLE Production Technician

DATE 8/10/88

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE
Federal Approval of this
Action is Necessary

cc: State of Utah - DOGM

Federal Approval of this
Action is Necessary

*See Instructions on Reverse Side

Accepted by the State
of Utah Division of
Oil, Gas and Mining

Date: 8-16-88

By: STL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DISPERSED ☐

2. NAME OF OPERATOR

QUINTANA PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR

1050 - 17th Street, Suite 400, Denver, Colorado 80265

4. LOCATION OF WELL (Report location clearly and in accordance with any Division of Oil, Gas & Mining instructions.)

At surface 500' FNL & 500' FWL (NW NW)

At top prod. interval reported below
Same

At total depth

Same

14. PERMIT NO.

43-037-31306

DATE ISSUED

1/21/87

15. DATE SPUDDED

4/10/87

16. DATE T.D. REACHED

4/23/87

17. DATE COMPL. (Ready to prod.)

SI 6/19/87

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

5712'

19. ELEV. CASINGHEAD

5712'

20. TOTAL DEPTH, MD & TVD

6295'

21. PLUG, BACK T.D., MD & TVD

5971'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0'-6295'

N/A

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

5940'-5953' - Ismay

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

DIL/Sonic/SP/GR/Cal; CNL/CDL/GR/Cal; Dipmeter; DLL/MG/Cal/SP/GR; CBL/VDL

27. WAS WELL CORED

Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	40#	2040.33'	12 1/4"	540 sxs Lite, 200 sxs "B"	None
5 1/2"	15.5# & 17#	6297.29'	8 3/4"	200 sxs Thixotropic	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A					2 7/8"	5924.84'	5908.71'

31. PERFORATION RECORD (Interval, size and number)

6063'-6065', 4 jspf, 4" gun - squeezed.*
6040'-6046', 4 jspf, 4" gun - squeezed.*
5986'-5999', 4 jspf, 4" gun - CIBP @5980'.*
5944'-5946', 4 jspf, 4" gun - open.
5940'-5953', 4 jspf, 4" gun - open.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5940'-5953' 1300	gal 15% FE acid w/additives
*see back for	squeeze details.

33.* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)					WELL STATUS (Producing or shut-in)	
6/16/87—flow test		Flowing					SI	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO	
6/19/87	12	16/64"	→	249	249	-0-	1000:1	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)		
600 psig	Packer	→	498	498	-0-	43.5° API		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Will be sold

TEST WITNESSED BY

R. C. Lynch

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

J. Williams

TITLE

Production Technician

DATE

9/14/87

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION		TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
					NAME	LOG TOP	TRUE VERT. DEPTH
CORE:		5943'-6003' - recovered 35'			Chinle	2026'	
		6003'-6038' - recovered 25'			Hermosa	4818'	
No DST's					Ismay	5909'	
					Hovenweep Shale	6072'	
					Lower Ismay	6114'	
					Gothic Shale	6157'	
					Desert Creek	6183'	
					Chimney Rock Sh	6252'	
					Akah	6276'	
					T.D.	6292' - Logger	
						6295' - Driller	

Cement squeeze on perforations:

6063'-6065' - spot 25 sxs cement, pressure tested to 2000 psi.
 6040'-6046' - spot 25 sxs cement, pressure tested to 2000 psi.
 5986'-5999' - set Arrow PDY CIBP at 5980', dump 2 sxs cement on top.
 Pressure tested to 2000 psi.

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
1-TAS	
2 - MICROFILM	
3 - FILE	

ENTITY ACTION FORM - FORM 6

OPERATOR QUINTANA PETROLEUM

OPERATOR ACCT. NO. N 9485

ADDRESS P. O. BOX 3331

HOUSTON, TEXAS 77253

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
D	10695	11010	43-037-31303	DEADMAN CYN FED. 2-20	SESE	20	37S	24E	SAN JUAN	1-24-87	
WELL 1 COMMENTS:											
D	10714	11010	43-037-31306	DEADMAN CYN FED. 1-28	NWNW	28	37S	24E	SAN JUAN	4-10-87	
WELL 2 COMMENTS: DEADMAN (UPPER ISMAY) UNIT EFFECTIVE AUGUST 1, 1989. THESE TWO WELLS ARE NOW A PART OF THE UNIT. ENTITY CHANGE EFFECTIVE AUGUST 1, 1989. QUINTANA IS GOING TO REPORT THE PRODUCTION OF THESE WELLS UNDER THE NEW ENTITY 11010.											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

**BOB RITCHIE
NOTIFIED OF NEW
ENTITY.

LCR

Signature

ADMIN. ANALYST

9-25-89

Title

Date

Phone No. (713) 651-8812

NOTE: Use COMMENT section to explain why each Action Code was selected.

DIVISION OF OIL, GAS AND MINING

355 West North Temple, 3 Triad, Suite 350, Salt Lake City, UT 84180-1203

Page 1 of 1

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

JEANNIE SNIDER
QUINTANA PETROLEUM CORP
1325 S COLORADO BLVD B411
DENVER CO 80222

UTAH ACCOUNT NUMBER: N9485

REPORT PERIOD (MONTH/YEAR): 11 / 94

AMENDED REPORT ☐ (Highlight Changes)

Well Name						Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location							OIL(BBL)	GAS(MCF)	WATER(BBL)
NORTH CHAPITA FED. 1-36						MVRD			U-56960	(Bedlands Unit)	BLm App. 1-25-95
4304731795	10745	08S	22E	36							
LITTLE BONANZA 1-4						NESE WSTC			U-54017	(C.A. UTH 71692)	BLm App. 1-25-95
4304731854	10937	09S	24E	4							
BADLANDS FEDERAL 1-31						MVRD			U-61401	(Bedlands Unit)	BLm App. 1-25-95
4304731857	10960	08S	23E	31							
CABALLO UNIT 1-15						ISMY			U-62953	(Caballos Unit)	"
4303731403	10994	36S	23E	15							
DEADMAN CANYON FEDERAL #2-20						ISMY			U-57469	(Deadman Unit)	"
4303731303	11010	37S	24E	20							
DEADMAN CANYON 3-20									U-57469	(Deadman Unit)	"
4303731304	11010	37S	24E	20							
DEADMAN CANYON FED #1-28						ISMY			U-49678	(Deadman Unit)	"
4303731306	11010	37S	24E	28							
BADLANDS FED #1-32						MVRD			U-56965	(Badlands Unit)	BLm App. 1-25-95
4304731869	11627	08S	23E	32							
Deadman Cn. 1-20						ISMY / GIW			U-57469	(Deadman Unit)	"
*4303731293	10696	37S	24E	20							
TOTALS											

COMMENTS:

I hereby certify that this report is true and complete to the best of my knowledge.

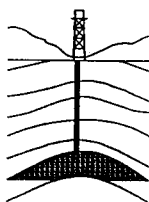
Date: _____

Name and Signature: _____

Telephone Number: _____

BALLARD & ASSOCIATES, INC.

P. O. Box 20174
Billings, Montana 59104
(406) 259-8790



518 17th St., Suite #1180
Denver, Colorado 80202
(303) 595-8515

W. W. Ballard
President

H. J. Kagie
Vice President

December 29, 1994

State of Utah
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, UT 84180-1204

Re: Change of Operator

Dear Sir/Madam:

Enclosed please find Sundry Notices and Reports on Wells submitted to the Bureau of Land Management to change operator from Quintana Petroleum Corporation to Ballard & Associates, Inc.

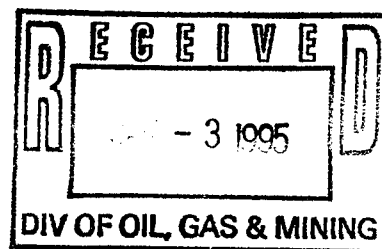
If you require additional information please contact me at (303) 595-8515.

Sincerely,

Jodie Sundquist
Production/Operation Technician

/jls

Enclosure



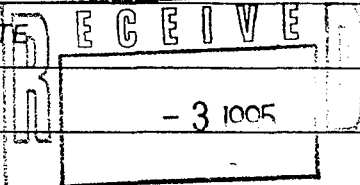
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE



1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Ballard & Associates

3. Address and Telephone No.

518 - 17th Street, Suite 1180, Denver, CO 80202 (303) 595-8515

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

500' FNL & 500' FWL
NW NW Section 28, T37S-R24E

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

UTU58818A

8. Well Name and No.

DEADMAN CANYON FED. #1-28

9. API Well No.

43-037-31306

10. Field and Pool, or Exploratory Area

Wildcat

11. County or Parish, State

San Juan County, Utah

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Change of Operator
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Effective 7:00 a.m. December 1, 1994, the Operator of this well will change from Quintana Petroleum Corporation to:

Ballard & Associates
518 - 17th Street, Suite 1180
Denver, Colorado 80202

Effective December 1, 1994, Ballard & Associates is responsible under the terms and conditions of the lease for operations conducted on the leased lands or a portion thereof under Bureau of Land Management Bond UT1005 issued by Norwest Bank Billings letter of credit.

Seller/Owner/Lessee Name: QUINTANA PETROLEUM CORPORATION

Date: December 7, 1994

cc: Utah DOGM

Signed: Jmswider

14. I hereby certify that the foregoing is true and correct

Signed

H. J. Ragie

Title Vice President Acquisitions

Date 12/19/94

(This space for Federal or State office use)

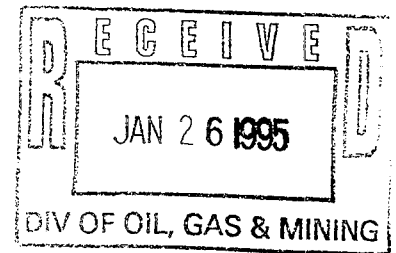
Approved by

Conditions of approval, if any:

Title

Date

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155



IN REPLY REFER TO:
UT-922

January 25, 1995

Ballard & Associates, Inc.
518 17th Street, Suite 1180
Denver, Colorado 80202

Re: Successor of Operator
Communitization Agreement (CA)
UTU71692
Uintah County, Utah

Gentlemen:

On January 23, 1995, we received an indenture dated December 1, 1994, whereby Quintana Petroleum Corporation resigned as Operator and Ballard & Associates, Inc. was designated as Successor Operator for CA UTU71692, Uintah County, Utah.

The instrument is hereby approved effective January 25, 1995. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under CA UTU71692.

Your statewide (Utah) oil and gas bond No. 1005 will be used to cover all operations within CA UTU71692.

It is requested that you notify all interested parties of the change in operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

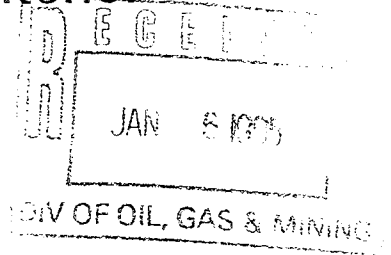
bcc: District Manager - Vernal (w/enclosure)
~~Division of Oil, Gas & Mining~~
File - CA UTU71692 (w/enclosure)
MMS - Data Management Division
Agr. Sec. Chron
Fluid Chron

U-922:TAThompson:tt:01-25-95

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155



IN REPLY REFER TO:
UT-922

January 25, 1995

Ballard & Associates, Inc.
518 17th Street, Suite 1180
Denver, Colorado 80202

Re: Deadman (Upper Ismay) Unit
San Juan County, Utah

Gentlemen:

On January 23, 1995, we received an indenture dated December 1, 1994, whereby Quintana Petroleum Corporation resigned as Unit Operator and Ballard & Associates, Inc. was designated as Successor Unit Operator for the Deadman (Upper Ismay) Unit, San Juan County, Utah.

The instrument is hereby approved effective January 25, 1995. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Deadman (Upper Ismay) Unit Agreement.

Your statewide (Utah) oil and gas bond No. 1005 will be used to cover all operations within the Deadman (Upper Ismay) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: District Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
Branch of Mineral Leasing Adjudication
File - Deadman (Upper Ismay) Unit (w/enclosure)
MMS - Data Management Division
Agr. Sec. Chron
Fluid Chron

** INSPECTION ITEM UTU58818A

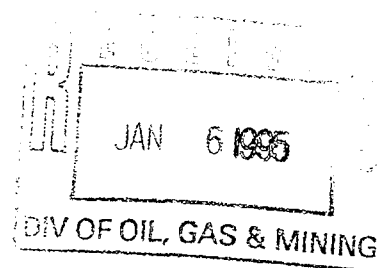
DEADMAN CANYON (UPPER ISMAY)

UTU58818A	430373129300S1	1-20	NWSE	20	37S	24E	GIW	UTU57469
UTU58818A	430373130600S1	1-28	NWNW	28	37S	24E	POW	UTU49678
UTU58818A	430373130300S1	2-20	SESE	20	37S	24E	POW	UTU57469
UTU58818A	430373130401S1	3-20 ST	SENW	20	37S	24E	TA	UTU57469

QUINTANA PETROLEUM CORPOR
QUINTANA PETROLEUM CORPOR
QUINTANA PETROLEUM CORPOR
QUINTANA PETROLEUM CORPOR

United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155



IN REPLY REFER TO:
UT-922

January 25, 1995

Ballard & Associates, Inc.
518 17th Street, Suite 1180
Denver, Colorado 80202

Re: Caballo Unit
San Juan County, Utah

Gentlemen:

On January 23, 1995, we received an indenture dated December 1, 1994, whereby Quintana Petroleum Corporation resigned as Unit Operator and Ballard & Associates, Inc. was designated as Successor Unit Operator for the Caballo Unit, San Juan County, Utah.

The instrument is hereby approved effective January 25, 1995. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Caballo Unit Agreement.

Your statewide (Utah) oil and gas bond No. 1005 will be used to cover all operations within the Caballo Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

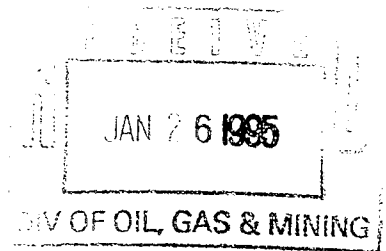
Enclosure

bcc: District Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
Branch of Mineral Leasing Adjudication
File - Caballo Unit (w/enclosure)
MMS - Data Management Division
Agr. Sec. Chron
Fluid Chron

U-922:TAThompson:tt:01-25-95

United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155



IN REPLY REFER TO:
UT-922

January 25, 1995

Ballard & Associates, Inc.
518 17th Street, Suite 1180
Denver, Colorado 80202

Re: Badlands Unit
Uintah County, Utah

Gentlemen:

On January 23, 1995, we received an indenture dated December 1, 1994, whereby Quintana Petroleum Corporation resigned as Unit Operator and Ballard & Associates, Inc. was designated as Successor Unit Operator for the Badlands Unit, Uintah County, Utah.

The instrument is hereby approved effective January 25, 1995. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Badlands Unit Agreement.

Your statewide (Utah) oil and gas bond No. 1005 will be used to cover all operations within the Badlands Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: District Manager - Vernal (w/enclosure)
Division of Oil, Gas & Mining
Branch of Mineral Leasing Adjudication
File - Badlands Unit (w/enclosure)
MMS - Data Management Division
Agr. Sec. Chron
Fluid Chron

U-922:TAThompson:tt:01-25-95

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

1- REC	✓
2- LWF 7-PL	✓
3- BTS 8-SJ	✓
4- VLC 9-FILE	✓
5- RJF	✓
6- LWP	✓

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

- ☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 12-1-94)

TO (new operator) BALLARD & ASSOCIATES INC	FROM (former operator) QUINTANA PETROLEUM CORP
(address) 518 - 17TH ST STE 1180	(address) 1325 S COLORADO BLVD B411
DENVER CO 80202	DENVER CO 80222
JODIE SUNDQUIST	JEANNIE SNIDER
phone (303) 595-8515	phone (303) 629-9559
account no. N 0895 (1-30-95)	account no. N 9485

Well(s) (attach additional page if needed):

Name: **SEE ATTACHED**	API: 037-31306	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

- Lee 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). *(Rec'd 1-3-95)*
- Lee 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). *(Rec'd 1-3-95)*
- Lee 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? *(yes)* If yes, show company file number: #172063
- Lee 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- Lee 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. *(1-30-95)*
- Lee 6. Cardex file has been updated for each well listed above. *2-9-95*
- Lee 7. Well file labels have been updated for each well listed above. *2-9-95*
- Lee 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. *(1-30-95)*
- Lee 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Yes 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

- Yes
N/A 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- ___ 2. A copy of this form has been placed in the new and former operators' bond files.
- ___ 3. The former operator has requested a release of liability from their bond (yes/no) _____. Today's date _____ 19____. If yes, division response was made by letter dated _____ 19____.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19____, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

- ✓ 1. All attachments to this form have been microfilmed. Date: February 21 1995.

FILING

- ___ 1. Copies of all attachments to this form have been filed in each well file.
- ___ 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

Bhm Appr. eff. 1-25-95

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801

Page 1 of 1

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

KRISTI A STOVER
 BALLARD & ASSOCIATES INC
 518 17TH ST STE 400
 DENVER CO 80202

UTAH ACCOUNT NUMBER: N0895

REPORT PERIOD (MONTH/YEAR): 3 / 97

AMENDED REPORT ☐ (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
✓NORTH CHAPITA FED. 1-36								
4304731795	10745	08S 22E 36	MVRD			456960	Bedlands Unit	
✓BADLANDS FEDERAL 1-31								
4304731857	10960	08S 23E 31	MVRD			461401	"	
✓CABALLO UNIT 1-15								
4303731403	10994	36S 23E 15	ISMY			462953	Caballo Unit	
✓DEADMAN CANYON FEDERAL 2-20								
4303731303	11010	37S 24E 20	ISMY			457469	Deadman (Upper Ismay) Unit	
✓DEADMAN CANYON 3-20								
4303731304	11010	37S 24E 20				457469	"	
✓DEADMAN CANYON FED 1-28								
4303731306	11010	37S 24E 28	ISMY			449678	"	
✓BADLANDS FEDERAL 1-32								
4304731869	11627	08S 23E 32	MVRD			456965	Bedlands Unit	
✓Deadman Cyn. Fed. 1-20								
4303731293	10696	37S 24E 20	ISMY / B1W			457469	Deadman (Upper Ismay) Unit	
TOTALS								

COMMENTS: _____

I hereby certify that this report is true and complete to the best of my knowledge.

Date: _____

Name and Signature: _____

Telephone Number: _____



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

In Reply Refer To:
3100
U-20544 et al
(UT-932)

APR 7 1997

NOTICE

Ballard Petroleum LLC : Oil and Gas
1050 Seventeenth Street, Suite 2500 :
Denver, CO 80265 :

Mergers Recognized

Acceptable evidence has been filed in this office concerning the merger of Ballard Energy 1992 Limited Partnership into Ballard Energy (Delaware) LP. Subsequently, Ballard Energy (Delaware) LP was converted to Ballard Energy (Delaware) LLC. Finally, Ballard Energy (Delaware) LLC merged into Ballard Petroleum LLC with Ballard Petroleum LLC being the surviving entity.

For our purposes, the final merger is recognized effective March 20, 1997, the date of approval by the Delaware Secretary of State.

The following oil and gas lease and right-of-way files have been noted as to the merger.

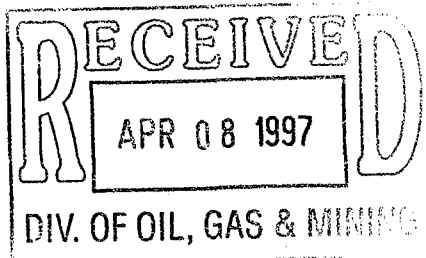
U-20544	Deedman-U-57469	Ceballos-U-62953	U-62073 (ROW)
Deedman-U-49678	U-58726	UTU-64422	U-63959 (ROW)
U-54017	U-61400	UTU-65471	U-63980 (ROW)
Bedlands-U-56960	Bedlands-U-61401	UTU-65472	U-63996 (ROW)
Bedlands-U-56965	U-62252	U-59127 (ROW)	UTU-65118 (ROW)

We are notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator are required by our Field Offices, you will be contacted by them.

The principal/obligor has already filed a rider changing the name on the statewide bond (BLM No. UT1005) to Ballard Petroleum LLC.

ROBERT LOPEZ

Group Leader,
Minerals Adjudication Group



cc:

Moab District Office

Vernal Field Office

San Juan Resource Area

MMS-Reference Data Branch, MS 3130, Box 5860, Denver, CO 80217

State of Utah, DOGM, Attn: Lisha Cordova (Ste 1210), Box 145801, SLC, UT 84114-5801

John F. Meck, Attorney-at-Law, 1775 Sherman St., Ste. 1800, Denver, CO 80203

Return recorded cop.
to:
Welborn Sullivan Mer
& Tooley, P.C.
1775 Sherman Street
Suite 1800
Denver CO 80203

AFFIDAVIT OF CONVERSION AND MERGERS

STATE OF COLORADO)

CITY AND COUNTY OF DENVER)

SS

KNOW ALL MEN BY THESE PRESENTS, on this date personally appeared before me H. J. Kagie, who, being first duly sworn, did depose and say:

- I am Senior Vice President of Ballard and Associates, Inc., a Montana corporation (herein "BAI"), whose principal place of business is 845 12th Street West, Billings, Montana 59102. I am over the age of 18 years and have personal knowledge of all the matters set forth in this Affidavit.
- BAI is sole Manager or sole General Partner of the following entities as set forth in the table:

<u>Name of Entity</u>	<u>Jurisdiction of Organization</u>	<u>Form of Entity</u>	<u>Manager or General Partner</u>
Ballard Petroleum LLC	Montana	limited liability company	Manager
Ballard Energy (Delaware) LLC	Delaware	limited liability company	Manager
Ballard Energy (Delaware) LP	Delaware	limited partnership	General Partner
Ballard Energy 1992 Limited Partnership	Montana	limited partnership	General Partner

3. Effective March 19, 1997, Ballard Energy 1992 Limited Partnership (herein "BELP") was merged with and into Ballard Energy (Delaware) LP (herein "Ballard Delaware" and, together with BELP, the "Constituent LP's"), pursuant to that certain Agreement and Plan of Merger dated March 19, 1997 among the Constituent LP's (the "LP Merger Agreement"), and Section 17-211 of the Delaware Revised Uniform Limited Partnership Act and Sections 35-10-641 through 643, inclusive, of the Montana Code Annotated (the "LP Merger"). The LP Merger Agreement was duly authorized, approved, executed and delivered by each LP Constituent in accordance with its governing documents and applicable law. Attached hereto as Exhibit A is a true and correct copy of the Certificate of Merger as filed in the Office of the Secretary of State, State of Delaware, at 2:30 p.m. on March 19, 1997, evidencing the LP Merger.

4. Effective March 19, 1997, Ballard Delaware was converted into Ballard Energy (Delaware) LLC (herein "Delaware LLC" and, together with Ballard Delaware, the "Conversion Constituents"), pursuant to Section 17-219 of the Delaware Revised Uniform Limited Partnership Act and Section 18-214 of the Delaware Limited Liability Company Act (the "Conversion"). The Conversion was duly authorized and approved by each Conversion Constituent in accordance with its governing documents and applicable law. Attached hereto as Exhibit B is a true and correct copy of the Certificate of Conversion as filed in the Office of the Secretary of State, State of Delaware, at 2:35 p.m. on March 19, 1997, evidencing the Conversion.

5. Effective March 20, 1997, Ballard Energy (Delaware) LLC (herein "Delaware LLC") was merged with and into Ballard Petroleum LLC (herein "Ballard Petroleum" and, together with Delaware LLC, the "Constituent LLC's"), pursuant to that certain Agreement and Plan of Merger dated March 20, 1997 among the Constituent LLC's (the "LLC Merger Agreement"), and Section 18-209 of the Delaware Limited Liability Company Act and Section 35-8-1201 of the Montana Code Annotated (the "LLC Merger"). The LLC Merger Agreement was duly authorized, approved, executed and delivered by each

LLC Constituent in accordance with its governing documents and applicable law. Attached hereto as Exhibit C is a true and correct copy of the Certificate of Merger as filed in the Office of the Secretary of State, State of Delaware, at 1:30 p.m. on March 20, 1997, evidencing the LP Merger.

6. Complete copies of the foregoing merger and conversion documents may be requested in writing from Ballard and Associates, Inc., 845 12th Street West, Billings, Montana 59102; Attention: W. W. Ballard.

7. Where necessary for recording purposes, Exhibit D is attached hereto to describe properties located within those states requiring such descriptions and owned by BERP immediately prior to the described conversion and mergers and which, as a result thereof, are owned by Ballard Petroleum LLC, effective as of March 20, 1997, at 1:30 p.m., the effective date of the LLC Merger.

Dated March 21, 1997.

H. J. Kagie
H. J. Kagie

WITNESSES:

Mary Morris-Stacy
Mary Morris-Stacy
Barbara Woods
Barbara Woods

BE IT REMEMBERED that the undersigned, a Notary Public duly qualified, commissioned, sworn and acting in and for the County and State aforesaid, hereby certifies that, on this 21st day of March, 1997, there appeared before me H. J. Kagie, and that:

[COLORADO, OKLAHOMA, UTAH, WYOMING]

The foregoing instrument was acknowledged before me on this date by H. J. Kagie and at the same time the Affiant was duly sworn to the foregoing affidavit.

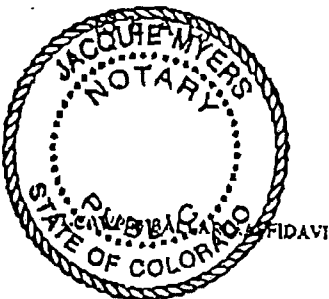
[MONTANA, NORTH DAKOTA]

On this day before me, a Notary Public of said State, duly commissioned and sworn, personally appeared such person, known to me, and, being duly sworn to the foregoing instrument, acknowledged to me that he executed the within instrument.

Given under my hand and official seal this 21st day of March, 1997.

My Commission Expires: March 22, 1999

Jacquie Myers
Notary Public



BALLARD PETROLEUM LLC

W. W. Ballard
President, Director

Billings, Montana



621 17th Street,
Suite 1800
Denver, Colorado 80293

(303) 675-0300 Office
(303) 675-0400 Facsimile



H. J. Kagie
Sr. Vice President, Director

Denver, Colorado

FAX TRANSMITTAL

The information contained in this facsimile message is legally privileged and confidential information intended solely for the use of the persons or entities named below. If you are not such persons or entities, you are hereby notified that any distribution, dissemination or reproduction of this facsimile message is strictly prohibited. If you have received this message in error, please immediately call us collect at (303) 595-8515.

TO: *Lisha Cordoba*
FAX: *801-359-3940*

FROM: *Bill Donovan*
FAX: 303-675-0400

NUMBER OF PAGES INCLUDING THIS SHEET: *3*

COMMENTS:

OPERATOR CHANGE WORKSHEET

Attach all documentation received by the division regarding this change.

Initial each listed item when completed. Write N/A if item is not applicable.

Routing	
1-IBC	6-IBC
2-GLH	7-KAS
3-DTS	8-SI
4-VLD	9-FILE
5-JRB	

☒ Change of Operator (~~well sold~~)☐ Designation of Agent☐ Designation of Operator☒ Operator Name Change ~~Only~~The operator of the well(s) listed below has changed, effective: 3-20-97

TO: (new operator) BALLARD PETROLEUM LLC
 (address) 621 17TH ST STE 1800
DENVER CO 80293

FROM: (old operator) BALLARD & ASSOCIATES INC
 (address) 518 17TH ST STE 400
DENVER CO 80202

Phone: (303)675-0300
 Account no. N2310 (7-18-97)

Phone: (303)675-0300
 Account no. N0895

WELL(S) attach additional page if needed:

*GIW

(CABALLO, BADLANDS & DEADMAN (UPPER ISMAY) UNITS)

Name	*DEADMAN CYN FED 1-20	43-037-31293	10696	20	37S	24E	U57469
Name: <u>NORTH CHAPITA FED 1-36</u>	API: <u>43-047-31795</u>	Entity: <u>10745</u>	S <u>36</u>	T <u>8S</u>	R <u>22E</u>	Lease: <u>U56960</u>	
Name: <u>BADLANDS FED 1-31</u>	API: <u>43-047-31857</u>	Entity: <u>10960</u>	S <u>31</u>	T <u>8S</u>	R <u>23E</u>	Lease: <u>U61401</u>	
Name: <u>CABALLO UNIT 1-15</u>	API: <u>43-037-31403</u>	Entity: <u>10994</u>	S <u>15</u>	T <u>36S</u>	R <u>23E</u>	Lease: <u>U62953</u>	
Name: <u>DEADMAN CYN FED 2-20</u>	API: <u>43-037-31303</u>	Entity: <u>11010</u>	S <u>20</u>	T <u>37S</u>	R <u>24E</u>	Lease: <u>U57469</u>	
Name: <u>DEADMAN CANYON 3-20</u>	API: <u>43-037-31304</u>	Entity: <u>11010</u>	S <u>20</u>	T <u>37S</u>	R <u>24E</u>	Lease: <u>U57469</u>	
Name: <u>DEADMAN CYN FED 1-28</u>	API: <u>43-037-31306</u>	Entity: <u>11010</u>	S <u>28</u>	T <u>37S</u>	R <u>24E</u>	Lease: <u>U49678</u>	
Name: <u>BADLANDS FEDERAL 1-32</u>	API: <u>43-047-31869</u>	Entity: <u>11627</u>	S <u>32</u>	T <u>08S</u>	R <u>23E</u>	Lease: <u>U56965</u>	

OPERATOR CHANGE DOCUMENTATION

1. (r649-8-10) Sundry or other legal documentation has been received from the FORMER operator (attach to this form). *(Rec'd 7-17-97)*
2. (r649-8-10) Sundry or other legal documentation has been received from the NEW operator (Attach to this form). *(Rec'd 7-17-97)*
3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is the company registered with the state? (yes/no) yes If yes, show company file number: #LC018225 (c.A. 3-17-97)
4. FOR INDIAN AND FEDERAL WELLS ONLY. The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of Federal and Indian well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
5. Changes have been entered in the Oil and Gas Information System (3270) for each well listed above. *(7-18-97) *UIC Program Updated.*
6. Cardex file has been updated for each well listed above. *(7-18-97)*
7. Well file labels have been updated for each well listed above. *(7-18-97)*
8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. *(7-18-97)*
9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Yes 1. (r649-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ If entity assignments were changed, attach copies of Form 6, Entity Action Form.
- N/A 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been **notified** through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

- N/A 1. (r649-3-1) The NEW operator of any fee lease well listed above has furnished a proper bond.
- Yes 2. A copy of this form has been placed in the new and former operator's bond files.
- ____ 3. The FORMER operator has requested a release of liability from their bond (yes/no) ____, as of today's date _____. If yes, division response was made to this request by letter dated _____.

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

- N/A 1. Copies of documents have been sent on _____ to _____ at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.
- Yes 2. (r649-2-10) The former operator of any fee lease wells listed above has been contacted and informed by letter dated _____ 19 ____, of their responsibility to notify all interest owners of this change.

FILMING

- Yes 1. All attachments to this form have been **microfilmed**. Today's date: 7-30-97

FILING

- ____ 1. Copies of all attachments to this form have been filed in each well file.
- ____ 2. The original of this form, and the original attachments are now being filed in the Operator Change file.

COMMENTS

970718 BLM Appr. eff. 3-20-97. (No official "Unit Operator Changes" copy of BLM Appr. Merger letter will be filed in unit files)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

5. Lease Serial No.	UTU-58818A
6. If Indian, Allottee or Tribe Name	N/A
7. If Unit or CA/Agreement, Name and/or No.	N/A
8. Well Name and No.	Deadman Canyon Federal 1-20, 2-20, 1-28 3" Run
9. API Well No.	43-037-31306
10. Field and Pool, or Exploratory Area	Deadman Canyon
11. County or Parish, State	SAN JUAN, Utah

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator BALLARD PETROLEUM, LLC	
3a. Address 845 12TH STREET WEST, BILLINGS, MT 59102	3b. Phone No. (include area code) 406.259.8790
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) NWSW, SEC 20, T37S, R24E	

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Exception to standard calibration
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form-3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Pursuant to a request from Western Gas Resources, Ballard Petroleum LLC requests permission to perform semi-annual meter calibration for the subject well. The monthly gas volume for May, 2000 was 1258 MCF.

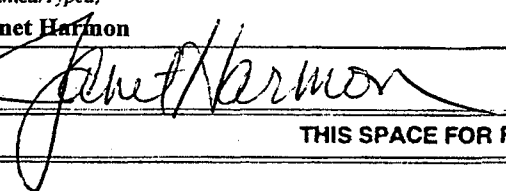
ATTACHMENT: Western Gas Resources Letter.

CC: w/attachment: State of Utah

RECEIVED

JUN 28 2000

**DIVISION OF
OIL, GAS AND MINING**

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Janet Harmon		Title Operations Assistant
Signature 		Date 6/26/00
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Western Gas Resources.

San Juan River Plant

Ballard and Associates
P.O. Box 577
Laurel, MT. 59044

Re: Caballo 1-15 and Deadman Canyon 3" and 6" runs Meter Numbers 91601118,91601121,91601109

Dear Sir or Madam:

Due to declining volumes and increased accuracy of our measurement points, I would like to request that a Sundry Notice be sent to the Bureau of Land Management requesting a reduction in settlement frequency from a quarterly to a semi-annual time frame. This will only be requested on wells producing less than 100 mcf/day. Listed above are the well name and WGR meter number corresponding to said well criteria. Please mail the attached Sundry notice to the BLM District office at BLM 82 E Dogwood Moab, Ut 84532 Attn: Mr. Eric Jones. If you have any questions, feel free to contact me at the number listed below. Thank you for your time.

Sincerely,

Tim Bates
Field Supervisor
San Juan River System

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

BALLARD PETROLEUM, LLC

3a. Address

845 12TH STREET WEST, BILLINGS, MT 59102

3b. Phone No. (include area code)

406.259.8790

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NWSW, SEC 20, T37S, R24E

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA/Agreement, Name and/or No.

N/A

8. Well Name and No. **Deadman Canyon 6" Run**

9. API Well No.

43-037-31306

10. Field and Pool, or Exploratory Area
Deadman Canyon

11. County or Parish, State

SAN JUAN, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Exception to standard calibration
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Pursuant to a request from Western Gas Resources, Ballard Petroleum LLC requests permission to perform semi-annual meter calibration for the subject well. The monthly gas volume for May, 2000 was 64 MCF.

ATTACHMENT: Western Gas Resources Letter.

CC: w/attachment: State of Utah

RECEIVED

JUN 28 2000

**DIVISION OF
OIL, GAS AND MINING**

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Janet Harmon

Title **Operations Assistant**

Signature

Date **6/26/00**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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Office

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Western Gas Resources.

San Juan River Plant

Ballard and Associates
P.O. Box 577
Laurel, MT. 59044

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Sincerely,

Tim Bates
Field Supervisor
San Juan River System

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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OMB No. 1004-0135
Expires November 30, 2000

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5. Lease Serial No.	U57469 + U49678
6. If Indian, Allottee or Tribe Name	N/A
7. If Unit or CA/Agreement, Name and/or No.	N/A Deadman Uti 58818A
8. Well Name and No.	Deadman Canyon 6" Run 1-20, 2-2 1-28
9. API Well No.	43-037-31306
10. Field and Pool, or Exploratory Area	Deadman Canyon
11. County or Parish, State	SAN JUAN, Utah

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	
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CC: w/attachment: State of Utah

RECEIVED

JUL 17 2000

DIVISION OF
OIL, GAS AND MINING

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Janet Harmon

Title Operations Assistant

Signature

Date 6/26/00

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Assistant Field Manager, 7/7/2000

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Division of Resources
Office

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CONDITIONS OF APPROVAL ATTACHED



Western Gas Resources.

San Juan River Plant

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P.O. Box 577
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Sincerely,

Tim Bates
Field Supervisor
San Juan River System

RECEIVED

JUL 17 2000

**DIVISION OF
OIL, GAS AND MINING**

Semi-annual Gas Meter Calibration
Ballard Petroleum, LLC
Deadman Canyon 6-inch Run
Deadman Unit (U-58818-A)
Wells: 1-20, U-57469
2-20, U-57469
1-28, U-49678
Sections 20 and 28 T37S, R24E
San Juan County, Utah

CONDITIONS OF APPROVAL

1. Approval of gas meter calibration on a semi-annual basis is granted.
2. Should production from this well improve to greater than 100 Mcf/day on a monthly basis, then this approval shall become void and calibration shall return to a quarterly schedule.
3. All other gas measurement requirements of Onshore Oil and Gas Order No. 5 (OOGO#5) shall remain in effect.
4. As always, if an error of greater than 2% is discovered during meter calibration, you must contact Jeff Brown of the Monticello Field Office at 435-587-1525, and submit corrected Monthly Reports of Operations as required by OOGO #5.

RECEIVED

JUL 17 2000

**DIVISION OF
OIL, GAS AND MINING**

WELBORN SULLIVAN MECK & TOOLEY, P.C.
ATTORNEYS AT LAW

821 17th Street, Suite 500
Denver, Colorado 80202
Telephone: 303-830-2500
Facsimile: 303-832-2366
E-mail: wsmt@wsmtlaw.com

July 2, 2002

Mr. Jim Thompson
State of Utah
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Post Office Box 145801
Salt Lake City, UT 84114-5801

Stephen J. Sullivan
John F. Meck
Keith D. Tooley
Kendor P. Jones
Brian S. Tooley
Thomas C. McKee
Stephen A. Bain
Molly Sommerville
William R. Rapson
Kathryn Haight
Kristen L. Mix
Amy E. Seneshen
Danielle V. Wiletsky
Rebecca N. Welborn

Special Counsel
John F. Welborn
Norman S. Early, Jr.

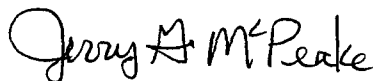
Re: AEC Oil & Gas (USA) Inc. name change to EnCana Oil & Gas (USA) Inc. Of Counsel
Robert F. Welborn

Dear Mr. Thompson:

Enclosed for filing with the Utah Division of Oil, Gas and Mining is a Certificate of Name Change from the Secretary of State of the State of Delaware certifying that AEC Oil & Gas (USA) Inc. changed its name to EnCana Oil & Gas (USA) Inc. on April 5, 2002, along with a list of the affected leases. Also enclosed is an additional copy of same which I would appreciate you stamping "filed" and returning to me in the enclosed self-addressed, stamped envelope provided for your convenience.

Thank you for your assistance in this matter. Should you have any questions concerning this letter or the enclosed, please do not hesitate to contact me at 303-376-4468.

Very truly yours,



Jerry G. McPeake
Paralegal

/jm
Enclosures

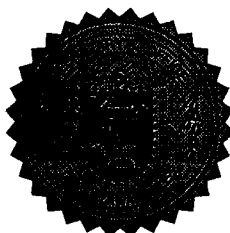
RECEIVED

JUL 05 2002

DIVISION OF
OIL, GAS AND MINING

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "AEC OIL & GAS (USA) INC.", CHANGING ITS NAME FROM "AEC OIL & GAS (USA) INC." TO "ENCANA OIL & GAS (USA) INC.", FILED IN THIS OFFICE ON THE FIFTH DAY OF APRIL, A.D. 2002, AT 4:12 O'CLOCK P.M.



2137895 8100

020418994

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 1858569

DATE: 06-27-02

**CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION
OF AEC OIL & GAS (USA) INC.**

AEC Oil & Gas (USA) Inc., a Delaware corporation (the "Corporation") hereby certifies as follows:

1. The Board of Directors and Sole Stockholder of the Corporation have adopted the following resolution in accordance with Section 242 of the General Corporation Law of the State of Delaware, as amended:

RESOLVED, that the Corporation's Certificate of Incorporation is hereby amended by deleting the FIRST paragraph of said certificate in its entirety and by substituting the following therefor:

"FIRST. The name of the Corporation is EnCana Oil & Gas (USA) Inc."

2. The capital of the Corporation shall not be reduced under or by reason of said amendment.

AEC OIL & GAS (USA) INC.

By: Mary A. Viviano
Mary A. Viviano, Secretary
Date: 4-5-02

Affected Leases (state)

AEC Oil & Gas (USA) Inc. changed its name to EnCana Oil & Gas (USA) Inc. effective, April 5, 2002. This name change affects all state land leases held in Utah by AEC Oil & Gas (USA) Inc. including the following:

GRAND COUNTY:

<u>AEC Lease No.</u>	<u>Lessor</u>	<u>Lessee</u>	<u>Description</u>
10601.000	ST UT ML 46758	Sonja V McCormick	Township 21 South, Range 18 East, SLM Section 32: All
10616.000	ST UT ML 46662	Sonja V McCormick	Township 21 South, Range 17 East, SLM Section 2: Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, S/2N/2, S/2 (All) Section 16: All Section 17: S/2SE/4 Section 36: All
10617.000	ST UT ML 46663	Sonja V McCormick	Township 21 South, Range 17 East, SLM Section 4: SE/4SW/4 Section 5: SW/4, W/2SE/4 Section 6: Lots 8, 9, 15, 16, SE/4 Section 7: Lots 1, 2, 3, E/NW/4, NE/4, NE/ Section 8: NW/4, NE/4SW/4
10622.000	ST UT ML 46664	Sonja V McCormick	Township 22 South, Range 18 East, SLM Section 9: Lot 1 Section 16: All
10853.000	ST UT ML 47575	Ballard Petroleum LLC	Township 21 South, Range 18 East, SLB&M Section 16: All
11768.000	ST UT 48143	Vern Jones	Township 22 South, Range 17 East, SLB&M Section 2: Lots 1, 2, 3, 4, S/2N/2, S/2
11769.000	ST UT 48144	Vern Jones	Township 22 South, Range 17 East, SLB&M Section 16: All
10686.000	ST UT ML 45868	Sonja V. McCormick	Township 23 South, Range 16 East, SLM Section 3: All - Bed of Green River Section 11: All - Bed of Green River Section 12: All - Bed of Green River

SAN JUAN COUNTY:

<u>AEC Lease No.</u>	<u>Lessor</u>	<u>Lessee</u>	<u>Description</u>
11318.000	ST UT ML 47813	Ballard Petroleum LLC	Township 36 South, Range 25 East, SLB&M Section 16: All
11319.000	ST UT ML 47815	Ballard Petroleum LLC	Township 37 South, Range 25 East, SLB&M Section 16: All
11320.000	ST UT ML 47805	Ballard Petroleum LLC	Township 22 South, Range 17 East, SLB&M Section 36: All

1. GLH
2. CDW
3. FILE

Merger

The operator of the well(s) listed below has changed, effective:		05-01-2002
FROM: (Old Operator):		TO: (New Operator):
AEC OIL & GAS USA INC		BAYLESS ROBERT L PRODUCERS LLC
Address: 950 17TH STREET, STE 2600		Address: P O BOX 168
DENVER, CO 80202		FARMINGTON, NM 87499
Phone: 1-(303)-623-2300		Phone: 1-(505)-326-2659
Account No. N2085		Account No. N7950

Unit: DEADMAN (UPPER ISMAY)

[illegible]

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/03/2002
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/03/2002
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 06/21/2002
4. Is the new operator registered in the State of Utah: YES Business Number: 850295400
5. If **NO**, the operator was contacted contacted on: N/A
6. (R649-9-2) Waste Management Plan received on: IN PLACE

6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: 06/18/2002

7. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: 06/18/2002

8. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

9. **Underground Injection Control ("UIC")**

The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 06/21/2002

2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 06/21/2002

3. Bond information entered in RBDMS on: N/A

4. Fee wells attached to bond in RBDMS on: N/A

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: N/A

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: 40S23024BC

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: N/A

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number N/A

2. The **FORMER** operator has requested a release of liability from their bond on: N/A

The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

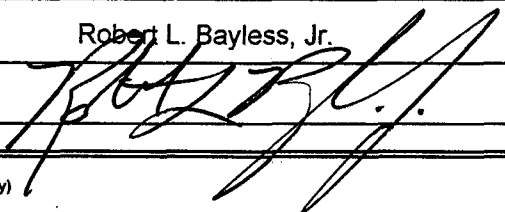
1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: U-57469
2. NAME OF OPERATOR: Robert L. Bayless, Producer LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 621 17th Street, Suite 1640 Denver, CO 80293-1640 STATE _____ ZIP _____		7. UNIT or CA AGREEMENT NAME: Deadman (Upper Ismay)
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0500 FNL 0500 FWL		8. WELL NAME and NUMBER: Deadman Canyon Fed 1-28
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 28 37S 24E S		9. API NUMBER: 4303731306
COUNTY: San Juan		10. FIELD AND POOL, OR WILDCAT: Deadman Canyon
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

New Operator:
Robert L. Bayless, Producer LLC
621 17th Street, Suite 1640
Denver, CO 80293-1640

BLM Bond #: 40S23024BCA

NAME (PLEASE PRINT) Robert L. Bayless, Jr.	TITLE Executive Manager
SIGNATURE 	DATE 5/7/02

(This space for State use only)

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JUN 03 2002

173-70

API	WELL NAME	LEASE	QUARTER/ QUARTER	SEC- TOWNSHIP- RANGE	COUNTY	WELL STATUS
43-037-30909	HORSEHEAD POINT 18-44	UTU40754	SESE	18-36S-25E	SAN JUAN	SI
43-037-31293	DEADMAN CANYON 1-20	UTU57469	NWSE	20-37S-24E	SAN JUAN	INJ
43-037-31303	DEADMAN CANYON 2-20	UTU57469	SESE	20-37S-24E	SAN JUAN	PROD
43-037-31304	DEADMAN CANYON 3-20	UTU57469	SESW	20-37S-24E	SAN JUAN	P&A
43-037-31306	DEADMAN CANYON 1-28	UTU49678	NWNW	28-37S-24E	SAN JUAN	SI
43-037-31403	1-15 CABALLO UNIT	UTU62953	NWNW	15-36S-23E	SAN JUAN	PROD
43-037-31795	NORTH CHAPITA 1-36	UTU56590	SWSW	36-8S-22E	UINTAH	PROD
43-037-31857	BADLANDS 1-31	UTU61401	SESW	31-8S-23E	UINTAH	P&A
43-047-31869	BADLANDS 1-32	UTU56965	SESE	32-8S-23E	UINTAH	PROD
43-047-33451	NORTH CHAPITA 24-31	UTU61401	SESW	31-8S-23E	UINTAH	PROD
43-047-33452	NORTH CHAPITA 44-30	UTU61400	SESE	30-8S-23E	UINTAH	PROD
43-047-33454	NORTH CHAPITA 44-36	UTU56960	SESE	35-8S-22E	UINTAH	PROD
43-049-30018	OIL HOLLOW 5-1	UTU77275	NWSW	5-11S-5E	UTAH	P&A
43-047-34084	FEDERAL 22-36	UTU56960	SESW	36-8S-22E	UINTAH	PROD
43-047-34085	FEDERAL 32-30	UTU61400	SWNE	30-8S-23E	UINTAH	PROD
43-047-33453	FEDERAL 44-31	UTU61401	SESE	31-8S-23E	UINTAH	PROD
43-047-34128	FEDERAL 24-36	UTU56960	SESW	36-8S-22E	UINTAH	APD
43-047-34180	FEDERAL 33-20	UTU77300	NWSE	20-8S-24E	UINTAH	APD
43-047-34182	FEDERAL 42-25	UTU65471	SENE	25-8S-22E	UINTAH	APD
43-047-34130	FEDERAL 41-36	UTU56960	NENE	36-8S-22E	UINTAH	APD
43-047-34016	FEDERAL 22-32	UTU56965	SESW	32-8S-23E	UINTAH	APD
43-047-34132	FEDERAL 43-36	UTU56960	NESE	36-8S-22E	UINTAH	APD
43-047-34181	FEDERAL 33-25	UTU65472	NWSE	25-8S-22E	UINTAH	APD
43-047-34179	FEDERAL 24-30	UTU61400	SESW	30-8S-23E	UINTAH	APD
43-047-34131	FEDERAL 43-31	UTU61401	NESE	31-8S-23E	UINTAH	APD
43-047-34127	FEDERAL 23-36	UTU56960	NESW	36-8S-22E	UINTAH	APD
43-047-34125	FEDERAL 22-36E	UTU78025	SESW	36-8S-23E	UINTAH	APD
43-047-34126	FEDERAL 23-31	UTU61401	NESW	31-8S-23E	UINTAH	APD
43-047-34178	FEDERAL 22-26	UTU76042	SESW	26-8S-23E	UINTAH	APD
43-047-34129	FEDERAL 41-31	UTU61401	NENE	31-8S-23E	UINTAH	APD

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JUN 19 2002

DIVISION OF
OIL, GAS AND MINING



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

IN REPLY REFER TO
UT-922

June 18, 2002

Robert L. Bayless, Producer LLC
621 17th Street, Suite 1640
Denver, Colorado 80202

Re: Deadman (Upper Ismay) Unit
San Juan County, Utah

Gentlemen:

On June 6, 2002, we received an indenture dated May 1, 2002, whereby AEC Oil & Gas (USA) Inc. with a name change recognized to EnCana Oil & Gas (USA) Inc. resigned as Unit Operator and Robert L. Bayless, Producer LLC was designated as Successor Unit Operator for the Deadman (Upper Ismay) Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective June 18, 2002. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Deadman (Upper Ismay) Unit Agreement.

Your statewide (New Mexico) oil and gas bond No. 0883 will be used to cover all operations within the Deadman (Upper Ismay) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
Minerals Adjudication Group U-924
File - Deadman (Upper Ismay) Unit (w/enclosure)
Agr. Sec. Chron
Fluid Chron

UT922:TAThompson:tt:6/18/02

Results of query for MMS Account Number UTU58818A

Production	API Number	Operator	Well Name	Well Status	Lease or CA Number	Inspection Item	Township	Range	Section	Quarter/Qual
Production	4303731293	BALLARD PETROLEUM LLC	1-20 DEADMAN CANYON-	GIW	UTU57469	UTU58818A	37S	24E	20	NWSE
Production	4303731303	BALLARD PETROLEUM LLC	2-20 DEADMAN CANYON-	POW	UTU57469	UTU58818A	37S	24E	20	SESE
Production	4303731304	BALLARD PETROLEUM LLC	3-20 DEADMAN CANYON	TA	UTU57469	UTU58818A	37S	24E	20	SENW
Production	4303731306	BALLARD PETROLEUM LLC	1-28 DEADMAN CANYON-	POW	UTU49678	UTU58818A	37S	24E	28	NWNW

DISCLAIMER for online data: No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

Form 3160-5
(August 1999)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*FORM APPROVED
Budget Bureau No. 1004-0135
Expires: November 30, 2000

5. Lease Serial No.
UTU-49678
6. If Indian, Allottee or Tribe Name
7. If Unit or C/A Agreement, Name and/or No.

UTU58818A, DEADMAN CANYON

8. Well Name and No.
DEADMAN CANYON FEDERAL #1-28

9. API Well No.
43-037-31306

10. Field and Pool, or Exploratory Area
WILDCAT

11. County or Parish, State
San Juan, Utah

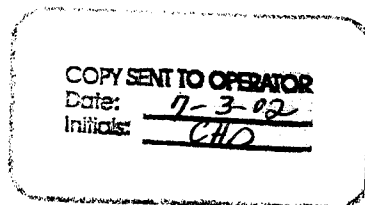
1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other
2. Name of Operator
Robert L. Bayless, Producer LLC
- 3a. Address
PO Box 168, Farmington, NM 87499
- 3b. Phone No. (include area code)
(505) 326-2659
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
500' FNL & 500' FWL, NW NW, Sec. 28, T37S, R24E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, A Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Bayless plans to dispose of some of its produced water at the City of Blanding, Utah for dust control. Some of the water will still be disposed of at Tincup Mesa or Lisbon Valley Hazmat.



APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 7-3-02
BY: [Signature]

Attached with FIDUS

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) THOMAS MCCARTHY	Title ENGINEER
Signature [Signature]	Date 6/10/02

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights to the subject lease which would entitle the applicant to conduct operation thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Federal Approval of this
Action is Necessary

RECEIVED

JUN 10 2002

DIVISION OF
OIL, GAS AND MINING

**Sundry Notice
Approval Conditions**

Well Names: Deadman Canyon Federal 1-28, 1-20, 2-20
McCracken Springs 1-31, 4-31

Sundry Date: 6-10-02

Proposed Action: Use of Produced Water for Dust Control

Conditions of Approval:

This is a temporary approval, for one year, issued due to drought conditions being experienced in Utah. Refer to the attached letter from the Utah Division of Water Quality concerning restricted use by the City of Blanding.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
*Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.*

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTU-49678
2. Name of Operator Robert L. Bayless, Producer LLC		6. If Indian, Allottee or Tribe Name
3a. Address PO Box 168, Farmington, NM 87499	3b. Phone No. (include area code) (505) 326-2659	7. If Unit or CA/Agreement, Name and/or No. UTU58818A, DEADMAN CANYON
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 500' FNL & 500' FWL, NW NW, Sec. 28, T37S, R24E		8. Well Name and No. DEADMAN CANYON FEDERAL #1-28
		9. API Well No. 43-037-31306
		10. Field and Pool, or Exploratory Area WILDCAT
		11. County or Parish, State San Juan, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	_____
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, A Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Bayless plans to dispose of some of its produced water at the City of Blanding, Utah for dust control. Some of the water will still be disposed of at Tincup Mesa or Lisbon Valley Hazmat.

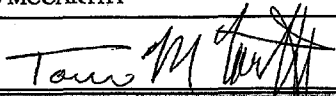
Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

RECEIVED

JUN 14 2002

DIVISION OF
OIL, GAS AND MINING

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) THOMAS MCCARTHY	Title ENGINEER
Signature 	Date 6/10/02

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operation thereon.

Title

Date

Office

Title 18 U.C.S. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Don A. Ostler, P.E.
Director

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Water Quality Board
K.C. Shaw, P.E.
Chairman

William R. Williams
Vice-Chairman

Robert G. Adams
Nan Bunker

Ray M. Child, C.P.A.

John R. Cushing, Mayor

Neil K. Kochenour, M.D.

Dianne R. Nielson, Ph.D.

Ronald C. Sims, Ph.D.

Douglas E. Thompson, Mayor

J. Ann Wechsler

Don A. Ostler, P.E.

Executive Secretary

June 26, 2002

Mr. Lowell Braxton, Director
Division of Oil, Gas and Mining
Department of Natural Resources
1594 W North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Dear ^{Lowell}Mr. Braxton:

Subject: Use of brine for dust suppression

This is in regards to a request made by the City of Blanding to use produced water on an unpaved road for dust suppression and to allow the road to be graded and recompact to remove washboard. This request, as explained by Mr. Danny Fleming, City Water Superintendent, is related to the severe draught currently being experienced in southern Utah resulting in the unavailability of other sources of water.

The Division of Water Quality is certainly sensitive to the problems and special needs of rural communities of the State being brought on by the draught. We understand the brine will be used very conservatively based on the cost of transport. Therefore, we would not expect any runoff or pooling of brine to create any significant surface or ground water quality risk. Furthermore, the brine would be applied to less than one mile of roadway, and only for this year, assuming the draught will hopefully end.

Based on the above, we have no objection to the City applying the brine according to the restrictions contained herein. This is not to be construed as a precedent for the indiscriminant or otherwise unauthorized disposal of produced water from oil and gas wells.

Sincerely,

Don A. Ostler, P.E.

Director

Utah Division of Water Quality

DAO:FCP:bjr

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JUN 27 2002

DIVISION OF
OIL, GAS AND MINING